"Barriers and facilitators in utilization of selected Maternal and Child Health Schemes among women in selected areas of Bhopal- a community based cross sectional survey."

Dissertation

Submitted to the Faculty of Nursing

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, BHOPAL

In partial fulfillment of the requirement for the degree of M.Sc. in

Obstetrics and Gynaecological Nursing

By

Mr. Prakash Garhwal

Enrollment No: 2300085N07P78017

Under the Guidance of

Dr. LiLy Podder

Associate Professor

Nursing College, AIIMS, Bhopal.

July, 2025

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Prakash
28/02/25

Mr. Prakash Garhwal

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This is to certify that the dissertation entitled, "***Barriers and facilitators in utilization of selected Maternal and Child Health Schemes among women in selected areas of Bhopal- a community based cross sectional survey***" is a bonafide and genuine research carried out by Mr. Prakash Garhwal under our guidance and direct supervision for the award of M.Sc. in Obstetrics and Gynaecological Nursing.

Guide:

Dr. Lily Podder,
Associate professor,
Nursing College,
AIIMS, Bhopal.

डॉ. लीली पोद्धार / Dr. Lily Podder
सह-प्राध्यापिका / Associate Professor
नर्सिंग महाविद्यालय / Nursing College
एम्स भोपाल, मध्य प्रदेश-462020
AIIMS Bhopal, (M.P.)-462020

Co-Guides:

Mrs.Geeta Bhardwaj
Assistant Professor
Nursing College,
AIIMS, Bhopal

गीता भारद्वाज / Geeta Bhardwaj
सहायक प्राध्यापिका / Assistant Professor
नर्सिंग महाविद्यालय / Nursing College
एम्स भोपाल, मध्य प्रदेश-462020
AIIMS Bhopal, (M.P.)-462020

Clinical co-guide

Dr. Arun Kumar Dora,
Professor, department of
Obstetrics & gynaecology,
AIIMS BHOPAL

Dr. Arun Dora 28.2.25
डॉ. अरुण कुमार दोरा
Reg. No. MP-30799, MBBS,MD (O&G)
प्राध्यापक ,प्रसूति एवं स्त्री रोग विभाग
अखिल भारतीय आयुर्विज्ञान संस्थान
साकेत नगर, भोपाल, म.प्र.–462020

Place: Bhopal 28/02/25
Date:

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, BHOPAL

CERTIFICATE

This is to certify that the dissertation entitled, ***"Barriers and facilitators in utilization of selected Maternal and Child Health Schemes among women in selected areas of Bhopal- a community based cross sectional survey."*** is the work carried out by **Mr. Prakash Garhwal** in the specialty of Obstetrics and Gynaecological Nursing, under the supervision and guidance of **Dr. Lily Podder** (Guide), **Mrs. Geeta Bhardwaj** (co-guide) and **Dr. Arun Kumar Dora** (Clinical co-guide).

28/2/2025

Dr. Mamta Verma

I/C Principal

Nursing College

AIIMS, Bhopal

प्रभारी प्राचार्या / In-Charge PRINCIPAL
नर्सिंग महाविद्यालय / Nursing College
एम्स भोपाल, मध्य प्रदेश-462020
AIIMS Bhopal, Madhya Pradesh-462020

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, BHOPAL

DECLARATION

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Prakash
28/02/25

Mr. Prakash Garhwal

Place: Bhopal

Date: 28/02/2025

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Mr. Prakash Garhwal

Prakash
28/02/25

Guide:

Dr. Lily Podder

Associate professor,

Nursing College, AIIMS, Bhopal.

Lpodder

डॉ. लिली पोद्दार / Dr. Lily Podder
सहायक प्राध्यापिका / Associate Professor
नर्सिंग महाविद्यालय / Nursing College
एम्स भोपाल, मध्य प्रदेश - 462020
AIIMS Bhopal, (M.P.) - 462020

Co-Guides:

Mrs. Geeta Bhardwaj

Assistant Professor

Nursing College, AIIMS, Bhopal

Geeta

गीता भारद्वाज / Geeta Bhardwaj
सहायक प्राध्यापिका / Assistant Professor
नर्सिंग महाविद्यालय / Nursing College
एम्स भोपाल, मध्य प्रदेश - 462020
AIIMS Bhopal, (M.P.) - 462020

Clinical co-guide

Dr. Arun Kumar Dora,

Professor, department of

Obstetrics & gynaecology, AIIMS BHOPAL

Dr AKDora 28.2.25

डॉ. अरुण कुमार दोरा
Reg. No. MP-30799, MBBS, MD (O&G)
प्राध्यापक, प्रसूति एवं स्त्री रोग विभाग
अखिल भारतीय आयुर्विज्ञान संस्थान
साकेत नगर, भोपाल, म.प्र.-462020

Place: Bhopal

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www.aiimsbhopal.edu.in Email: ihecpgr@aiimsbhopal.edu.in

Ref Number: IHEC/SR/2024/108 **Date: 1 Feb 2024**

Letter of Permission

Student Investigator:	Guide:	Co-Guides:
PRAKASH GARHWAL NURSING COLLEGE MSc Nursing	DR. LILY PODDER NURSING COLLEGE	DR. MAXIE MARTIS, ASSOCIATE PROFESSOR, NURSING COLLEGE, DR. ARUN KUMAR DORA, PROFESSOR, DEPARTMENT OF OBSTETRICS & GYNECOLOGY, AIIMS BHOPAL

AIIMS, Bhopal Institutional Human Ethics Committee- Student Research (IHEC-SR) in its 9th meeting held on 1 Feb 2024 discussed your proposal titled **BARRIERS AND FACILITATORS IN UTILIZATION OF SELECTED MATERNAL AND CHILD HEALTH SCHEMES AMONG WOMEN IN SELECTED AREAS OF BHOPAL- A COMMUNITY BASED CROSS SECTIONAL SURVEY.**

Following members attended the meeting:

Sr No.	Name/Post	Role
1	Prof. Manisha Shrivastava, Prof. & Head, Dept. of Transfusion Medicine, BMHRC, Bhopal	Chairperson
2.	Prof. Rajnish Joshi, Prof. & Head, Dept. of General Medicine, AIIMS Bhopal	Clinician Member
3.	Prof. Amit Agrawal, Prof. & Head, Dept. of Neurosurgery, AIIMS Bhopal	Clinician Member
4.	Prof Sunita Athavale, Prof. & Head, Dept. of Anatomy, AIIMS Bhopal	Pre-Clinical Member
5.	Prof Girish C Bhatt, Professor, Pediatrics, AIIMS Bhopal	Clinical Member
6.	Dr. Sunaina Tejpal Kama, Additional Professor, Dept. of Anesthesiology, AIIMS Bhopal	Clinician Member
7.	Dr. Ujjawal Khurana, Associate Professor, Dept. of Pathology, AIIMS Bhopal	Para -Clinical Member
8.	Mr. Trivesh Goswami, Law Officer, AIIMS Bhopal	Legal Person
9.	Ms. Anjali Singh	Lay Person
10.	Prof. Neelkamal Kapoor, Former Prof & Head, Dept of Pathology, AIIMS Bhopal	Social Scientist
11.	Dr. Ankur Joshi, Additional Professor, Dept. of CFM, AIIMS Bhopal	Member Secretary

The decision of the committee is as follows:

The AIIMS, Bhopal IHEC-SR approves your research protocol. All research related activities must begin only after the date of this approval. The validity of this approval is till two years from the date of issuance. Please submit a closure report / renewal request before expiration of the validity for this approval.

Dr. Ankur Joshi
Member Secretary, AIIMS Bhopal IHEC-SR

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No. AIIMS/BPL/Dean (N&AHS)/2025/ 1674 Date: 30/01/2025

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Subject: Revised list co-Guide allotment for M.Sc. Nursing 2nd Year dissertation (Batch, 2023).

Ref. No.: 1. Application received vide no. 13498 dated 06.11.2024 reg. matter of co-guide.
2. E-file no. 31398 and Note # 11 remarks received from the current co-guide.

With reference to the above subject mentioned, As per the directives of the Honourable Executive Director Sir in a meeting held on 03/10/2024 following faculty of the Nursing College is allotted as guide & Co-guide for dissertation of M.Sc. Nursing 2nd Year students (Batch, 2023) in the place of Dr. Maxie Martis, Associate Professor, Nursing College, AIIMS Bhopal. All other terms and conditions will remain as per LOP issued ref no. IHEC/SR/2024/108 Dated 01/02/2024.

Sr. No.	Name of the student	Topic	Previously allotted Guide	New Allotted Guide	Previously allotted Co guide	New Allotted Co-guide	Clinical Co- Guide
1.	Prakash Garhwal	Barriers and facilitators in utilization of selected maternal and child health schemes among women in selected areas of Bhopal a community based cross sectional survey	Dr. Lily Podder	No Change	Dr. Maxie Martis, Associate Professor, Nursing College	Mrs. Geeta Bhardwaj Assistant Professor	Dr. Arun Kumar Dora, Professor, Department Of Obstetrics & Gynecolog, AIIMS Bhopal

This is issued with approval of Member Secretary IHEC-SR, AIIMS Bhopal vide efile no. 31398 dated 29/01/2025.

Prof. (Dr.) Amit Agrawal
Officiating Dean (Nursing and AHS)
AIIMS Bhopal

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6. Assistant Registrar (N&AHS)
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My sincere thanks to the central library staff and non-teaching staff at the Nursing College, AIIMS, Bhopal, for their assistance throughout this research process.

Each of these individuals has played an integral role in my success, and I am deeply thankful for that.

With deepest gratitude,

Mr. Prakash Garhwal

Date:

Place: Bhopal

ABSTRACT

INTRODUCTION:

Every day, complications related to pregnancy or childbirth claim the lives of about 830 women worldwide. According NFHS-5, MMR of Madhya Pradesh is 173 which is 3rd highest MMR in India. Maternal and child health (MCH) remains a crucial public health priority in India, especially in states like Madhya Pradesh, where maternal and infant mortality rates are high. Various government initiatives, such as Janani Suraksha Yojana (JSY), Janani Shishu Suraksha Karyakram (JSSK), and Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), aim to improve MCH outcomes. However, financial constraints, socio-cultural beliefs, and inadequate healthcare infrastructure continue to impede the utilization of these services. This study investigates the barriers and facilitators influencing the uptake of MCH schemes in Bhopal to inform policy interventions and improve healthcare accessibility.

METHODS

A community-based cross-sectional survey was conducted among 206 women aged 18–45 years who had given birth within the past year in selected urban areas of Bhopal. A self-structured interview questionnaire was used for data collection, focusing on socio-demographic characteristics, scheme utilization, and perceived barriers and facilitators. Validity was confirmed by expert review and reliability was established using the test-retest method. Ethical clearance was obtained from institutional IHEC committee, and informed consent was secured from all participants before data collection. Descriptive and inferential statistics was performed using IBM SPSS version 25.0, chi-square test and logistic regression test are used for association with socio-demographic variables and barriers and facilitators in utilization.

RESULTS

Among the participants, 52.9% were aged 20–30 years, and the majority were Hindu (57.3%). JSY and JSSK showed 100% utilization, whereas SUMAN (42.2%) and PMSMA (17%) had lower uptake. Key barriers included inadequate transport (56.8%), delayed cash incentives (57.8%), lack of female doctors (60.7%), drug shortages (57.3%), and unclean healthcare environments (58.3%). Facilitators enhancing utilization included proximity to health centres (56.3%), free services (55.3%), supportive husbands (68%), and positive healthcare experiences (56.3%). Various socio-demographic factors were significantly associated with barriers and facilitators. Barriers included religion (p=0.03) and duration of marriage (p=0.002) affecting cash incentives and mother's education associated with waiting times (p=0.02). Facilitators included mother's education improving access to free health facilities (p=0.02), type of family enhancing healthcare interactions (p=0.002), and number of children influencing husbands' acceptance of health facilities (p=0.04). According regression analysis findings Hindu (4.9 times) and Muslim mothers (4.2 times) were more likely to face delays in receiving cash incentives than Christian mothers. In facilitators mothers with one child had more positive healthcare experiences (1.8 times). Illiterate mothers (11.4 times) were more likely to accept healthcare facilities compared to diploma or graduation mothers.

CONCLUSION

This study highlights disparities in the utilization of maternal and child health schemes in urban Bhopal. While JSY and JSSK have full coverage, SUMAN and PMSMA remain underutilized. Addressing barriers such as transport limitations, delays in cash incentives, and shortages of female doctors can enhance the effectiveness of these schemes. Strengthening healthcare policies and improving service accessibility can contribute to better maternal and child health outcomes, aligning with the Sustainable Development Goals (SDGs).

KEYWORDS: Barriers, Facilitators, Maternal and Child Health, Health Schemes.

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LIST OF ABBREVIATIONS

S. NO.	ABBREVIATIONS	EXPANSION
1.	AIIMS	All India Institute of Medical Sciences
2.	MCH	Maternal and child health schemes
3.	NHM	National Health mission
4.	JSY	Janani Suraksha Yojana
5.	I-CVI	Item Content Validity Index
6.	IHEC-SR	Institutional Human Ethics Committee-Student Research
7.	JSSK	Janani Shishu Suraksha Karyakram
8.	SUMAN	Surakshit Matratva Ashwasan
9.	PMSMA	Pradhan Mantri Surakshit Matritva Abhiyan
10.	IMNCI	Integrated Management of Neonatal and Childhood Illness
11.	M.Sc.	Master of Science
12.	MO	Medical Officer
13.	SCVI	Scale Content Validity Index
14.	SPSS	Statistical Package for the Social Sciences
15.	WHO	World Health Organization
16.	HBM	Health Belief Model
17.	AOR	Adjusted odds ratio
18.	CI	Confidence interval

LIST OF SYMBOLS

S.NO	SYMBOLS	EXPANSION
1.	%	Percent/Percentage
2.	>	More than
3.	<	Less than
4.	≤	Less or equal to
5.	H_0	Null Hypotheses
6.	H_1	Research Hypotheses
7.	N	Sample size
8.	$Z_{(1-\alpha/2)}$	1.96 at Confidence level 95%
9.	P	Estimated proportion of event of interest
10.	Q	The proportion of the population that does not exhibit the characteristic under consideration
11.	D	Desired margin of error
12.	=	Equal to
13.	p	Level of significance
14.	f	Frequency

CHAPTER-1

INTRODUCTION

CHAPTER-1

INTRODUCTION

Background of the study

Maternal and child health (MCH) remains a critical area of public health, particularly in low- and middle-income countries, where access to healthcare services is often hindered by various socio-economic, cultural, and systemic barriers. The utilization of maternal and child health schemes is influenced by numerous facilitators and barriers, including financial constraints, lack of awareness, inadequate healthcare infrastructure, and socio-cultural beliefs [(1)]. Understanding these factors is crucial for improving the effectiveness of healthcare policies and interventions aimed at reducing maternal and child mortality rates.

India has made significant progress in reducing its Maternal Mortality Ratio (MMR), decreasing from 384 per 100,000 live births in 2000 to 103 in 2020 [(22)], as reported by the United Nations Maternal Mortality Estimation Inter-Agency Group. Further improvements were noted, with the MMR reaching 97 per 100,000 live births in 2022, according to the Registrar General of India's Special Bulletin. Despite these advancements, the MMR in India remains above the Sustainable Development Goal target of 70 per 100,000 live births. [(24)] This underscores the importance of identifying and addressing the barriers and facilitators affecting the utilization of maternal and child health schemes. Studies have highlighted that despite the availability of maternal and child health services, utilization remains suboptimal due to challenges such as inadequate health system capacity, shortage of trained personnel, and lack of community engagement [(2)].

In Ethiopia, for instance, a qualitative exploration revealed that perceptions about healthcare services and logistical challenges significantly impacted service uptake [3]. Additionally, research conducted in the Democratic Republic of the Congo indicated that supply-side factors, including resource allocation and health facility distribution, played a crucial role in service availability [5].

Barriers to healthcare access also extend to social determinants, such as gender norms, literacy levels, and economic status. In Pakistan, implementation research demonstrated that community perceptions and engagement strategies were pivotal in shaping healthcare-seeking behaviors [6].

Need and Justification

Despite numerous governmental and non-governmental initiatives, the effective utilization of maternal and child health schemes remains inconsistent across different populations. Identifying and addressing the barriers and facilitators in accessing these services is essential to enhance maternal and child health outcomes (Maternal Health Task Force, 2017) [8]. A comprehensive understanding of these factors can aid in the formulation of targeted strategies to bridge existing gaps in service delivery.

The findings of previous systematic reviews and qualitative studies underscore the need for evidence-based policymaking to optimize healthcare service utilization [10]. For instance, barriers such as lack of transportation, financial constraints, and inadequate information about health schemes have been identified in multiple settings, indicating the need for context-specific interventions [9] .

Given the global emphasis on achieving universal health coverage and reducing maternal and child mortality, this study is timely and necessary. Strengthening health systems and addressing socio-economic disparities can significantly impact health outcomes, making it imperative to explore the factors influencing the utilization of maternal and child health schemes [16].

By identifying the key barriers and facilitators influencing MCH service utilization among women in select areas of Bhopal, this study will contribute to evidence-based strategies for improving the quality, accessibility, and uptake of healthcare services. Ultimately, these efforts align with global Sustainable Development Goals (SDGs), specifically those targeting the reduction of maternal and child mortality.

Research problem

Barriers and facilitators in utilization of selected maternal and child health schemes among women in selected areas of Bhopal- a community based cross sectional survey.

Research questions

1. What are the barriers in utilization of selected Maternal and Child Health Schemes among women residing in selected areas of Bhopal?
2. What are the facilitators in utilization of selected Maternal and Child Health Schemes among women residing in selected areas of Bhopal?
3. Is there any association between selected socio demographic variables and barriers and facilitators in utilization of selected Maternal and Child Health Schemes?

Objectives of the study

1. To assess the barriers in utilization of selected Maternal and Child Health Schemes among women.
2. To assess the facilitators in utilization of selected Maternal and Child Health Schemes among women.
3. To determine an association between socio-demographic variables and barriers and facilitators in utilization of selected Maternal and Child Health Schemes among women.

Hypothesis

- **H_{01}** There is no significant association between barriers and socio-demographic variable in the utilization of selected Maternal and Child Health Schemes at 0.05 level of significance.
- **H_{02}** There is no significant association between facilitators and socio-demographic variable of selected Maternal and Child Health Schemes at 0.05 level of significance.

Operational definitions

1. **Barriers**: In Present study it refers to all the difficulties faced by women in utilization of selected Maternal and Child Health Schemes.
2. **Facilitators:** In Present study it refers to all the factors that influence the utilization of selected Maternal and Child Health Schemes.
3. **Women:** In this study it refers to women aged between 18 to 45yr and who had their last childbirth within 1 years.
4. **Maternal and Child Health Schemes:** In the Present study it refers to selected maternal and child health schemes that is under National Health Mission (NHM) 2022, In this study following Schemes will be included

- **Surakshit Matratva Ashwasan (SUMAN)-**

a. Launched in 2019

b. Aim-

i. Zero Preventable Maternal and Newborn Deaths

ii. High quality of maternity care delivered with dignity and respect

c. **Services-**

i. Free and No expense access

ii. zero tolerance for denial of services

iii. Conditional cash transfers/direct benefit transfer under various schemes

- **Janani Suraksha Yojana (JSY)-**

a. Launched on 12th April 2005

b. Aim-

iv. Reducing Maternal and Infant Mortality

v. Promoting institutional Counsel for institutional delivery

c. Services-

vi. Cash incentive

vii. Free delivery

viii. 1400 Rs for rural

ix. 1000 Rs for urban area

Delimitations

The study is limited to:

- The participants have been selected from selected urban area of Bhopal only.
- Only women who speak and understand Hindi or English were included.
- Delimited to two MCH programmes (JSY&SUMAN).

Conceptual framework:

A conceptual framework is an analytic tool with several variations. It is used to make theoretical, abstract and conceptual similarities and systematize the ideas of the present study. Stronger the conceptual framework greater is the effect of the concepts. [25,26]

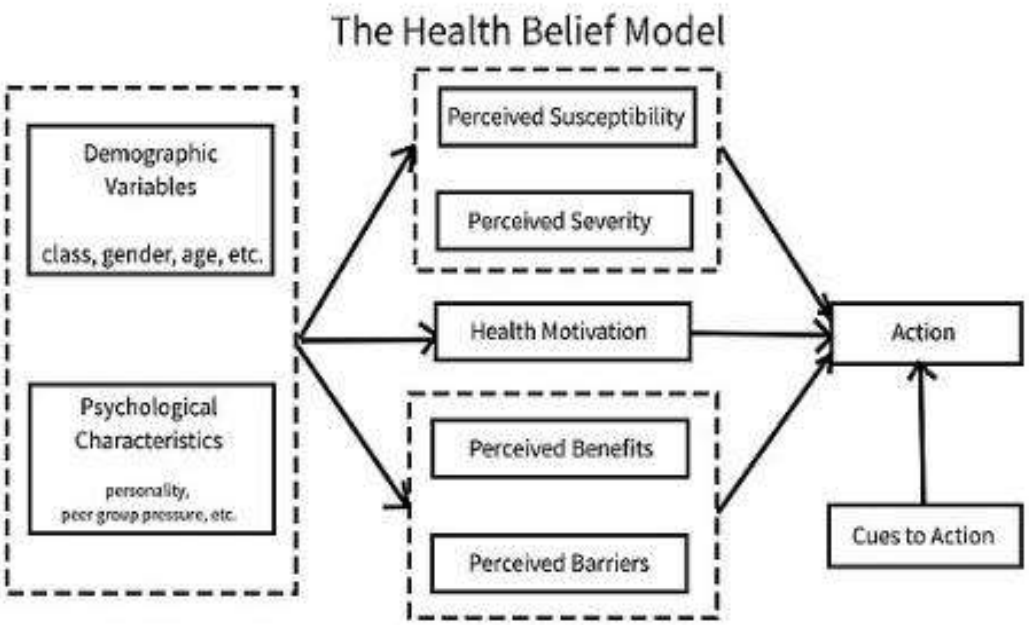


Fig. 1- Health Belief Model

The conceptual framework for this study is based on the Health Belief Model (HBM), which explains health-related behaviors by focusing on individual beliefs and perceptions. It helps in understanding the barriers and facilitators affecting the utilization of maternal and child health (MCH) schemes among women in selected areas of Bhopal.[27]

1. Utilization of MCH Schemes
    - This represents the primary outcome of interest—how women engage with and benefit from maternal and child health schemes. The extent to which they use these schemes depends on various facilitators and barriers, as conceptualized in the HBM.
2. Demographic Variables

- Age, religion, educational level of mother, Socioeconomic status, Residence, type of family, duration of marriage, number of children.

3. Cues to Action

- These are the triggers that encourage women to use MCH schemes, such as awareness campaigns, advice from healthcare providers, family influence, or prior experiences. These cues play a vital role in shaping health-seeking behavior.

4. Perceived Benefits

- This factor considers how women perceive the advantages of MCH schemes, such as free services, financial incentives, and improved maternal and child health outcomes. The more significant the perceived benefits, the more likely women are to use these schemes.

5. Perceived Barriers

- Several challenges may hinder the utilization of MCH schemes, including:
  - Financial constraints: Despite free services, indirect costs (e.g., travel expenses, loss of daily wages) may act as barriers.
  - Limited awareness: Many women may not fully understand the benefits or eligibility criteria of MCH schemes.
  - Social and cultural factors: Traditional beliefs, family influence, and stigma may discourage participation in government programs.

- Distance and accessibility: Long distances to healthcare facilities or lack of transportation may limit access.
- Service delivery issues: Poor quality of care, long wait times, and negative experiences with healthcare providers can affect utilization.

6. Perceived Susceptibility
    - This reflects a woman's belief about her risk of experiencing pregnancy complications or child health issues. A higher perceived susceptibility increases the likelihood of utilizing MCH services.
7. Perceived Severity
    - Women's perception of how serious maternal and child health issues can be if left unaddressed influences their decision to use MCH schemes. If they believe that complications during pregnancy and childbirth could lead to severe consequences, they may be more motivated to seek care.

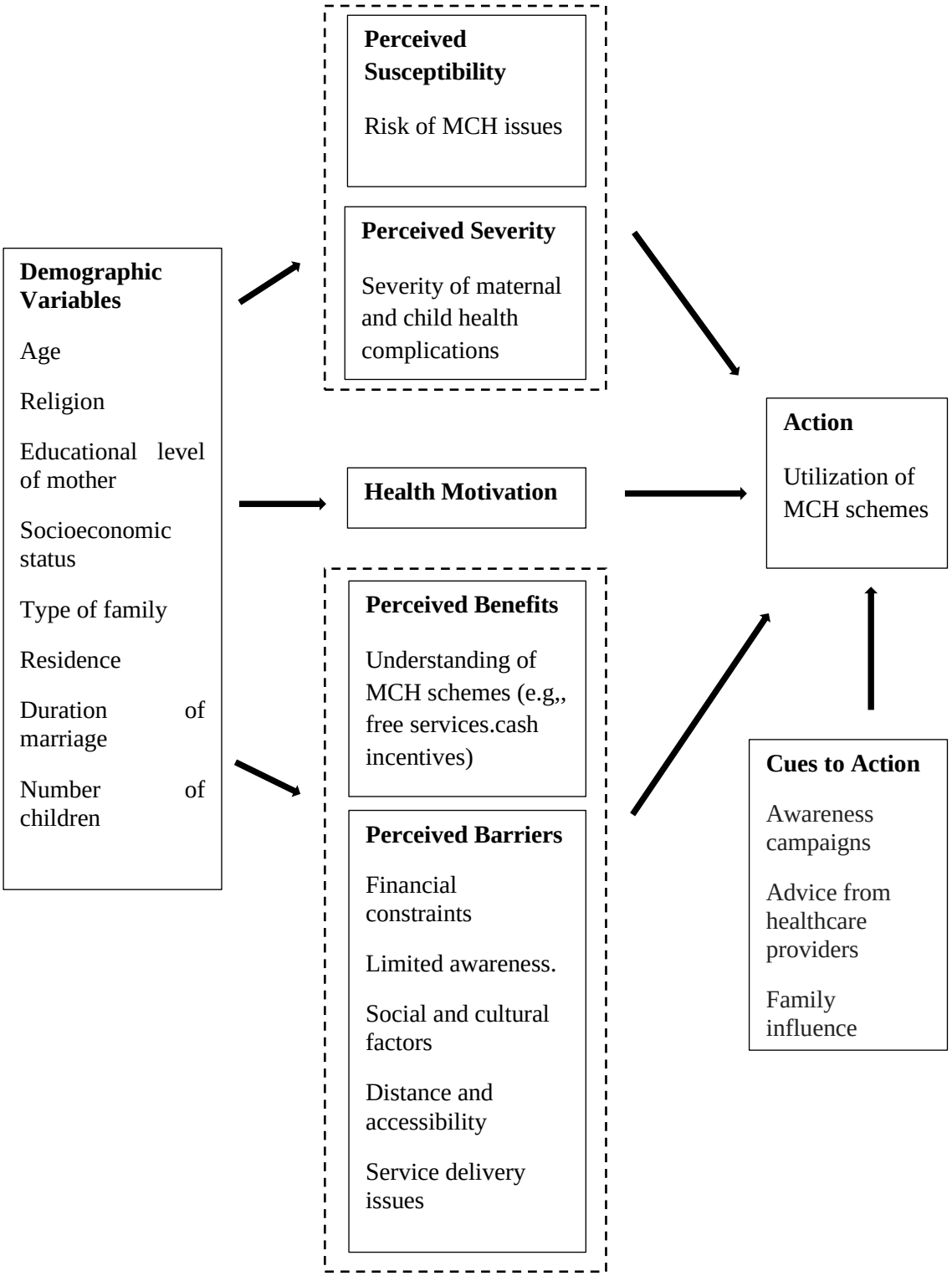


Fig 2- Conceptual Framework based on Health Belief Model (HBM)

Summary

The study's background, need, problem statement, objectives, research questions, hypotheses, operational definitions, and conceptual framework were all covered in the chapter.

CHAPTER-2

REVIEW OF LITERATURE

Chapter 2

REVIEW OF LITERATURE

A review of literature typically involves summarizing and synthesizing existing scholarly works relevant to a particular topic or research question. While doing review of literature there is thorough or deep understanding of research. Literature review has been carried out in various search engines like PubMed, Scopus, Research gate, Google Scholar etc., using the keywords like utilization, facilitators, barriers, maternal and child health schemes, NHM schemes, MCH schemes, JSY scheme.

Therefore, a review of the literature was conducted and the pertinent information related to the current study is presented in the following sections.

1. Literature related to barriers in utilization of selected Maternal and Child Health Schemes
2. Literature related to facilitator in utilization of selected Maternal and Child Health Schemes.

Table 1

Description of search strategy of Review of Literature

Online	**Offline (Grey Literature)**
• PubMed • Research Gate • Scopus • Google Scholar	• Journals • Books • Unpublished articles
Key Words	NHM schemes JSY MCH schemes Child Health schemes Barriers Utilization Facilitators
Boolean Operators	And, OR, NOT
Total researches found	Total 52 researches are found related to this key word for my research.
Included and excluded	26 research included and 26 are excluded

Table 1 Represents the search strategy used for the review of literature

1. Literature related to **barriers in utilization of selected Maternal and Child Health Schemes**

A meta-review assessing global barriers to quality maternal, newborn, and child health services. The review included 73 studies but did not report a precise sample size. It identified poor governance, resource limitations, and workforce shortages as systemic barriers. A significant finding was that over 40% of facilities in low-resource settings faced inadequate staffing or supplies. The review suggests improving governance and resource allocation to ensure better health service delivery for maternal and child health. (3)

Study explored barriers to maternal health service utilization in Southern Ethiopia through qualitative methods. The study involved 30 in-depth interviews and 12 focus group discussions with local women, healthcare workers, and community leaders. The findings revealed that transportation difficulties and lack of healthcare awareness were the primary barriers, with 43% of participants citing transportation as a major issue. The study advocates for improving local infrastructure and healthcare literacy to enhance service utilization. (4)

Duff et al. (2024) analyzed supply-side barriers to maternal and child health services in the Democratic Republic of the Congo through a systematic review of 16 studies. The research identified that 45% of healthcare facilities lacked essential medical supplies, contributing to service interruptions. Key barriers included insufficient funding and poor health facility conditions. The review suggests that strengthening health infrastructure and increasing financial investment are crucial to improving service availability and quality in the region. (5)

Research on barriers to maternal and child health service utilization in District Dadu, Sindh, Pakistan. The study involved 400 households and reported that 54% of women faced difficulties in accessing health services due to financial constraints and socio-cultural barriers. The study also found that 23% of households experienced challenges related to the distance to the nearest

healthcare facility. The research emphasizes the need for community engagement and improving transportation access to enhance service uptake. **(6)**

Barriers to engaging communities in maternal and newborn health programs, drawing on findings from 28 programs across multiple low-resource settings. The review highlighted that social stigma and gender norms were significant barriers, with 32% of women reporting that gender discrimination prevented them from accessing services. The review recommends improving community-level education and challenging cultural norms to increase engagement in maternal and newborn health programs. (7)

Burnet Institute (2015) examined barriers to implementing WHO maternal and perinatal health guidelines in four lower-income countries. The study found that 60% of healthcare providers reported inadequate resources as a key barrier, and 50% of healthcare facilities lacked essential medical equipment. The review calls for better integration of guidelines into national policies, improving healthcare worker training, and securing adequate financial support to ensure better maternal and perinatal health outcomes.[8]

A systematic review of barriers to implementing lay health worker programs for maternal and child health. The review analyzed data from 18 studies, with a combined sample size of 2,600 lay health workers. The study found that lack of training and inadequate supervision were key barriers, and 45% of lay health workers reported insufficient support from healthcare providers. The review recommends enhancing training programs and establishing stronger supervisory mechanisms to improve program success.[9]

A systematic review to identify barriers to implementing clinical practice guidelines in low- and middle-income countries. The study included 17 studies and found that 46% of healthcare facilities faced financial constraints, and 34% of healthcare providers expressed resistance to change as

significant obstacles. The review suggests increasing funding, improving training, and engaging healthcare providers in the guideline implementation process to improve adoption.[10]

A qualitative study on barriers to implementing lay health worker programs. The review included 14 studies and found that 36% of programs faced resistance from professional healthcare providers, while 28% reported issues with integrating lay health workers into formal health systems. The review emphasizes the need for better integration and support for lay health workers to improve maternal and child health outcomes.[12]

A reviewed study on barriers to implementing clinical practice guidelines in low- and middle-income countries. The study included 15 studies and found that 55% of healthcare providers faced resource shortages, and 38% experienced policy implementation issues. The review recommends addressing these barriers through improved funding, training, and policy enforcement to ensure better healthcare delivery and guideline adherence.[13]

Factors influencing antenatal care utilization in Kenya through a cross-sectional study with 1,500 women. The study found that 47% of women cited affordability issues, and 35% reported long distances to healthcare facilities as major barriers to antenatal care utilization. The research calls for improving healthcare access through transportation solutions and reducing the financial burden on expectant mothers.[13]

A community-based maternal and child health program in the Democratic Republic of Congo. The study analyzed data from 1,200 participants and found that logistical constraints and poor infrastructure were the main barriers to service utilization, with 23% of women citing transportation issues. The study suggests improving logistics and infrastructure to increase the effectiveness of maternal and child health programs.[16]

A systematic review of health system implementation strategies in low-income countries, examining 16 studies. The research identified that 41% of health systems faced funding shortages, and 37% reported weak governance as barriers to effective service delivery. The review advocates for improving governance, securing adequate funding, and expanding the healthcare workforce to enhance health system functionality and service provision.[17]

2. Literature related to **facilitator in utilization of selected Maternal and Child Health Schemes.**

A meta-review of 56 studies to analyze the quality of care in maternal, newborn, and child health. 83% of women in health education programs showed increased utilization, highlighting the role of trained healthcare staff and community-based interventions in improving maternal health care accessibility.[3]

A qualitative exploratory study using 30 in-depth interviews in Southern Ethiopia to understand barriers and facilitators to maternal health service utilization. 58% of women who participated in community health programs utilized maternal services, showing the importance of local health workers and health education programs.[4]

A mixed-methods study, involving 80 interviews and 25 focus group discussions in District Dadu, Sindh, Pakistan. The study found that 64% of women accessed maternal health services with mobile health interventions and community-based programs, emphasizing the effectiveness of local healthcare networks.[5]

A case study review of 12 community-based maternal and newborn health programs. The review indicated that peer education and community health workers helped increase service utilization by 50% through culturally appropriate health models and local leader involvement.[6]

A cross-sectional study in 4 lower-income countries to examine the implementation of WHO maternal and perinatal health guidelines. 30% more women accessed services after healthcare worker training programs were introduced, showcasing the importance of training and resource allocation.[8]

A systematic review of 27 studies focused on lay health worker programs. The study found that 45% of women utilized maternal health services when lay health workers were involved, demonstrating the facilitatory role of community trust and adequate training in improving healthcare access.[9]

A systematic review of 42 studies to explore barriers and enablers for implementing clinical practice guidelines in low- and middle-income countries. The study found that 38% more women utilized maternal health services with collaborative partnerships and training for healthcare providers, emphasizing the role of policy support.[10]

A mixed-methods systematic review of 45 studies in India. 72% of women in rural areas accessed maternal care services following the introduction of national health schemes and community-based awareness campaigns, indicating the importance of healthcare infrastructure improvements and skilled workers.[11]

A cross-sectional study with 1,200 women in Kenya to analyze factors influencing antenatal care utilization. 24% of women in health education programs used antenatal services more frequently, highlighting the facilitatory role of skilled healthcare providers and health education programs.[14]

Bright et al. (2018) performed a systematic review of 16 studies focused on access to healthcare for individuals with disabilities in low- and middle-income countries. The review found that

31% of individuals reported improved healthcare access, including maternal services, due to inclusive healthcare policies and accessible health facilities.[15]

Lee et al. (2019) used a difference-in-differences analysis in the Democratic Republic of Congo to examine the impact of community health workers and financial support for transportation on maternal health service utilization. The study found that 53% of women in rural areas accessed maternal health services after mobile health clinics were introduced, showing the positive impact of community-based interventions.[16]

An overview of systematic reviews on implementation strategies for health systems in low-income countries. The study found that 25% improvement in service utilization occurred following community engagement and training programs for healthcare providers. It highlighted the importance of capacity-building and community-based strategies in improving access to maternal health services.[17]

Research Gap-

Although several maternal and child health schemes have been introduced, their utilization varies significantly among women across different areas of Bhopal. Research has shown that factors such as socio-economic status, geographic accessibility, and educational background play a crucial role in determining service uptake. There is limited research specifically addressing the barriers and facilitators affecting the utilization of these schemes in the context of Bhopal. Understanding these factors can help in designing targeted interventions to improve the effectiveness of maternal and child health programs in the region.

Summary:

The chapter presents an extensive review of literature related to the study title, systematically organized under the two thematic headings: literature related to barriers in utilization of

selected Maternal and Child Health Schemes, literature related to facilitator in utilization of selected Maternal and Child Health Schemes. The studies reviewed highlight that financial incentives, community participation, digital technology, health awareness programs, and free transport services are effective facilitators of maternal healthcare utilization. However, barriers such as poor infrastructure, cultural resistance, and bureaucratic inefficiencies continue to restrict access.

CHAPTER-3

MATERIALS & METHODS

Chapter 3

MATERIAL AND METHODS

Research methodology is a step-by-step process to solve a research question by logical adaptation of various steps. It aids in understanding not only the products of scientific inquiry but also the process itself.

This section must include the essential details of the research. This chapter comprises the study methodology, research approach, research design, research variables, setting of the study, population, sample and sample size, sampling technique, criteria for selection of samples, development of tool. description of tool, technique of data collection, validity and reliability of tool, ethical consideration, pilot study, data collection procedure, and plan for data analysis. The aim of the present study was to assess barriers and facilitators in utilization of selected maternal and child health schemes among women in selected areas of Bhopal- a community based cross sectional survey**.**

Research approach

A research approach encompasses a strategic blueprint used by the researcher to establish the most effective techniques for gathering, analyzing, and interpreting data. It serves as the foundation framework that guides the researcher in producing precise and comprehensible information. [(26)]

Quantitative research approach was employed to achieve the specific objectives of this study.

Research design

Cross sectional descriptive research design.

A cross-sectional study design that collects data from a population at a single point in time. [(25)]

Research variables -

Socio-Demographic variables- Age, religion, educational level of mother, Socioeconomic status, Residence, type of family, duration of marriage, number of children.

Research Variables- Barriers and facilitators in utilization of maternal and child health services.

Research setting: Barkhera Pathani and Sai baba Nagar PHC area of Bhopal district adopted by community and family medicine department of AIIMS Bhopal.

Population:

Target population- Women 18-45 years of age who had last childbirth within 1 year.

Accessible population-Women of Bhopal district who are 18-45 years of age who had last childbirth within 1 years residing at Barkhera Pathani and Sai baba Nagar PHC area of Bhopal district under community and family medicine department of AIIMS Bhopal.

Sample- It includes participants from accessible population who are available during the data collection and are willing to enroll in the study after signing an informed consent.

Inclusion Criteria

Included women who are-

- Willing to participate in this study
- 18-45 years of age and who had Childbirth within last 1 year.
- Available at the time of data collection.

Exclusion criteria:

Exclude the women who are:

- Having any critical illness.
- Who are not able to comprehend Hindi or English (e.g.- dumb, hearing difficulty,)

The sample size is calculated using the previous study titled-

Study Title - "A cross-sectional study to assess the utilization pattern of maternal health services and associated factors in aspirational district of Haryana, India". [2]

[n = (Z1-a/2) 2 × p (1-p)/d2 [Cochran's formula]

P= Estimated proportion

P=0.16 [utilization of ANC services from previous study 16%]

Z = level of confidence i.e. 1.96

d = precision i.e. 5 %

SAMPLE SIZE: 206

Sampling technique

In this study, non-probability convenient sampling technique was used.

Data collection tool

Description of tool: - Using pertinent literature, a self-structured interview questionnaire developed consisting of three sections. The questions will be assessed by face interview technique. (The researcher will ask the question): **Section A** covers socio-demographic variables of women; **Section B** encompasses Utilization of NHM schemes; **Section C** covers Barriers and Facilitators in the utilization of schemes

Validity and Reliability of tool

Validity: - The face validity of the tool was established after discussion with the guide and co-guide whereas the content validity was established by scale content validity index whereas the self-structured tool submitted to 7 experts. Item content validity index (I – CVI) and scale content validity index (S – CVI) was calculated. The S-CVI for Section A, Section B and Section C was 0.98, 1 and 0.99. Content validity of the self-structured tool was established. Subsequently, the tool underwent translation from English to Hindi, and a back translation was conducted by language experts in both languages.

Reliability: - By test-retest method using SPSS version 25.0 trial version.

- Tool testing was done on 21 women residing at Barkhera phathani and Sai Baba nagar PHC area, who age between 18-45 year and who had last child birth in 1 year.
- Test retest correlation (Cronbach`s alpha) value (r) for tool-1 = 0.961; indicating acceptable reliability of the tool.
- Test retest correlation (Cronbach`s alpha) value (r) for tool-2 = 0.984; indicating acceptable reliability of the tool.

Language translation: Expert linguists in Hindi and English, respectively, reviewed and validated the English-to-Hindi and Hindi-to-English translations of the tool, confirming the tool's reliability in both languages. (ANNEXURE 8& 9)

Technique of data collection

In this study, participants were selected using a screening tool based on inclusion and exclusion criteria. Data collection was done using self-structured Interview schedule . The questions were clear and audible to participants' then offered responses recorded and then data collection termination with thank you note.

Table 2: Description of tools and techniques for the data collection

Tool	**Techniques of data collection**
Section A- Socio demographic variables	• Interview
Section B- MCH Schemes under NHM	• Interview
Section C- Barriers and facilitators in utilization of MCH schemes (Domains under this section are Socio-economical, Educational, Culture& language, Personal, Health center related problem and Health professionals)	• Interview

Ethical consideration

- Written permission has been taken from IHEC-SR Committee.
- LOP has been received on 01/02/24. (IHEC/SR/2024/108)
- Permission was taken from medical officer of Barkhera pathani and Sai baba Nagar PHC for data collection. (ANNEXURE 10)
- Informed consent was taken from the study participants. (ANNEXURE 11 &12)
- Confidentiality of the participants maintained.

Pilot study:

A pilot study is characterized as a small-scale trial run of the techniques and methods that would be applied during a bigger-scale study. The pilot study for this study was also conducted with the same objectives, data collection procedures and analysis techniques**.**

A total of 21 participants i.e. 10% of the actual sample size (206) were recruited for the pilot study after the establishment of validity and reliability of the tool.

Pilot study was conducted at women residing at Barkhera phathani and Sai Baba nagar PHC area, who age between 18-45 year and who had last child birth in 1 year.

Participants in the study were chosen using a screening tool. After introducing oneself and building rapport, the subject was informed of the study purpose and consent was taken from them. The subject was questioned by the researcher, and the answers were noted on the questionnaire. For one patient, the entire process took 25-30 minutes. Pilot study indicated that the research was not only feasible but also served to acquaint the researcher with the study environment. The pilot study helped in understanding the feasibility of the study and identifying the problems that can be faced in the future.

Procedure for data collection:

After obtaining ethical clearance and permission from concerned authorities data collection was started from 9th August 2024 and continued up to 16 September 2024, women who participated during pilot study data collection were excluded from main data collection. All women residing at Barkhera phathani and Sai Baba nagar PHC area, who age between 18-45 year and who had last child birth in 1 year meeting inclusion were chosen carefully. The process began with visit to the PHC of area, where contact information of nearby Anganwadi obtain. After that visit Anganwadi workers and get information about eligible mothers for my study. Data was collected by door-to-door visits except on Tuesday and Friday because this day, immunization camp was at Anganwadi, so women visit there. (Eligibility of women screen and included for data collection)

The purpose of the study was explained and written informed consent was obtained from the participants. After introducing myself and building a rapport with the participants, I explained the study purpose, and each subject provided written consent. Every day, on average, 15 to 20 women were enrolled in the study. Afterward, I proceeded with face-to-face interviews to implement the final tool. The complete procedure for each participant took approximately 25 to 30 minutes. The collected data underwent analysis utilizing both descriptive and inferential statistics.

Plan for data analysis:

The data analysis strategy encompasses both descriptive and inferential statistical methods. Subsequent to editing, coding, and tabulation, a master data sheet was prepared to facilitate further analysis. The data analysis process utilized IBM SPSS version 25.0 trial version.

- Frequency and percentage distribution was done for analysis of distribution of socio-demographic variables of participants.
- Frequency and percentage distribution was done for analysis of distribution. To assess the barriers in utilization of selected Maternal and Child Health Schemes among women. Here, barriers are included, which responses NO more than 50% of utilization questions by total participants.
- Frequency and percentage distribution was done for analysis of distribution. To assess the facilitators in Utilization of selected Maternal and Child Health Schemes among women. Here, facilitators are included, which responses YES more than 50% of utilization questions by total participants.
- Chi-square and logistic regression analysis was used to determine an association between socio-demographic variables and barriers and facilitators in utilization of selected Maternal and Child Health Schemes among women.

Summary

This chapter discusses the research approach and design, the variables studied, the research setting, inclusion and exclusion criteria for the population, sample size, sampling technique, data collection tool, tool validity and reliability, tool translation process, ethical considerations, pilot study details, data collection procedures, and the data analysis plan.

CHAPTER- 4

RESULTS

CHAPTER – 4

RESULTS

The information gathered through self-structured and standardized questionnaires was analyzed using descriptive and inferential statistical methods addressing the objectives and hypotheses of the study.

The data was analyzed using IBM SPSS (Version 25.0 trial version), based on the objectives of the study. Data analysis is a process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested." **Polit and Hunglar (1991)** describe it as a "a process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested."[26]

ORGANIZATION OF THE FINDINGS:

SECTION 1: Description of Socio-demographic Characteristics of participants.

SECTION 2: Description of Utilization of MCH Schemes and selected MCH Schemes under NHM

SECTION 3: Description of Barriers in utilization of selected Maternal and Child Health Schemes.

SECTION 4: Description of Facilitators in Utilization of selected Maternal and Child Health Schemes.

SECTION 5: Description of association between socio-demographic variables and barriers and facilitators in utilization of Maternal and Child Health Schemes.

SECTION – 1

Information on Socio-demographic characteristics

This section deals with the description of the sociodemographic characteristics of the sample (women who had last child birth in last 1 year) in terms of frequency and percentage.

Table No: 3

Frequency & percentage distribution of participants according to their sociodemographic characteristics

n = 206

Demographic data		
	Frequency (f)	**Percentage (%)**
1. Age (in years)		
A) <20	25	12.1
B) 20-30	109	52.9
C) 30-40	72	35.0
D) >40	0	0
2. RELIGION		
A) Hindu	118	57.3
B) Muslim	68	33.0
C) Christian	20	9.7
D) Other (Specify)_____	0	0
3. Socio economic class (Modified Kuppuswamy socioeconomic scale 2023)		
A) Upper(I)	26	12.6
B) Upper middle (II)	99	48.1
C) Lower middle (III)	46	22.3
D) Upper lower (IV)	35	17.0
E) Lower (V)	0	0
4. RESIDENCE		
A) Barkhera Pathani	110	53.4
B) Saibaba Nagar PHC	96	46.6
5. TYPE OF FAMILY		
A) Nuclear	91	44.2

B) Joint	63	30.6
C) Extended	52	25.2
6.DURATION OF MARRIAGE		
A) <1 year	9	4.4
B) 1-2 years	41	19.9
C) 2-3 years	58	28.2
D) >3 years	98	47.6
7.Number of children		
A) 1	106	51.5
B) >1	100	48.5
8.Educational status of the mother		
A) Illiterate	9	4.4
B) Primary education (up to 5th standard)	81	39.3
C) Secondary/higher education (up to 12th standard)	70	34.0
D) Diploma/graduation	46	22.3

Interpretation: The data depicted in Table 3 shows that study participants are primarily aged 20-30 years (52.9%), with no participants over 40. Predominantly Hindu (57.3%), the participants also includes Muslims (33.0%) and Christians (9.7%). Most participants fall within the Upper Middle class (48.1%), and are nearly evenly split between residences in Barkhera Pathani (53.4%) and Saibaba Nagar PHC (46.6%). The most common family type is nuclear (44.2%). Nearly half of the participants have been married for over three years (47.6%), with a nearly even split between having one child (51.5%) and more than one child (48.5%). The educational status of mothers ranges from illiterate (4.4%) to diploma/graduation (22.3%).

SECTION 2:

Description of Utilization of MCH Schemes and selected MCH Schemes under NHM

This section deals with Description of Utilization of MCH Schemes and selected MCH Schemes under NHM

Table No: 4: Distribution of Utilization of MCH Schemes under NHM

n = 206

Schemes	Frequency(f)	Percentage (%)
1. JSY (Janani Suraksha Yojana)		
Yes	206	100
No	0	0
2.JSSK (Janani Shishu Suraksha Karyakram)		
Yes	206	100
No	0	0
3.SUMAN (Surakshit Matratva Ashwasan)		
Yes	87	42.2
No	119	57.8
5. **Extended PMSMA** (Pradhan Mantri Surakshit Matritva Abhiyan)		
Yes	35	17
No	171	83
6. **IMNCI** (Integrated Management of Neonatal and Childhood Illness)		
Yes	0	0
No	206	100
7. **NSSK** (Navjat Shishu Suraksha Karyakram)		
Yes	0	0
No	206	100

Interpretation: The data depicted in Table 4 shows that healthcare scheme utilization reveals full participation in JSY (Janani Suraksha Yojana) and JSSK (Janani Shishu Suraksha Karyakram) with 100% coverage. However, the SUMAN (Surakshit Matratva Ashwasan)

scheme is less utilized, with only 42.2% participation. The Extended PMSMA (Pradhan Mantri Surakshit Matritva Abhiyan) has a low uptake of 17%.

Table No 5: Distribution of Utilization of JSY and SUMAN schemes under NHM

n = 206

SCHEME	Benefits Utilized	Frequency (f)	Percentage (%)
1. JSY	i. You got institutional delivery counseling by any health professional		
	YES	154	74.8
	NO	52	25.2
	ii. You got any incentive for institutional delivery under this scheme.		
	YES	174	84.5
	NO	32	15.5
	iii. You need to pay any charges during delivery.		
	YES	52	25.2
	NO	154	74.8
2.SUMAN	i. You pay any health service charges during pregnancy and delivery.		
	YES	122	59.2
	NO	84	40.8
	ii. You find any denial in providing health facilities at the health center.		
	YES	124	60.2
	NO	82	39.8
	iii. You got any cash incentive under this scheme.		
	YES	82	39.8
	NO	124	60.2

Interpretation: The data depicted in Table 5 shows that JSY (Janani Suraksha Yojana) scheme utilization reveals that 74.8% received institutional delivery counseling, 84.5% obtained incentives for institutional delivery, and 74.8% did not incur delivery charges. For SUMAN (Surakshit Matratva Ashwasan), 59.2% had to pay health service charges during pregnancy and delivery, while 60.2% faced denial of health facilities at the health center. Additionally,

39.8% received cash incentives under SUMAN. This data underscores the effective utilization of JSY benefits but highlights significant gaps in SUMAN's implementation.

SECTION 3

Description of Barriers in utilization of selected Maternal and Child Health Schemes.

This section deals with description of Barriers in utilization of selected Maternal and Child Health Schemes.

Table No: 6

Distribution of Barriers in utilization of selected Maternal and Child Health Schemes.

n = 206

Domain	**Questions**	**Frequency(f)** of **No** response	**Percentage (%)** of **No** response
1. Socio-economical	Good transport is available to reach the healthcare center.	117	56.8
	The cash incentives have been transferred to your bank account in due time.	119	57.8
2. Educational	You attended any awareness program related to health schemes.	118	57.3
3. Culture & language	Health professionals communicate in your understandable language.	110	53.4
	Health professionals respect your cultural values.	104	50.5
4. Personal	Timing schedule of the health care center convenient for you.	125	60.7
5. Health centre related problem	The government makes payments as specified by the health schemes.	108	52.4

	You need not wait for Health facilities at the health centers.	128	62.1
	You find adequate accessibility of benefits related to maternal health care schemes at health care center	111	53.9
	Prescribed drugs/investigations are available at the health center.	118	57.3
	The environment at the healthcare center clean and hygienic	120	58.3
6. Health Professionals	Female doctor is available at the health center.	125	60.7
	You receive explanation and teaching about health condition at health care center.	123	59.7

Interpretation: The data depicted in Table 6 shows that 56.8% participants face issues with transport to healthcare centers, while 57.8% experience delays in receiving cash incentives. 57.3% did not attend health awareness programs, and 53.4% face communication challenges with health professionals. 50.5% feel their cultural values are not respected. Additionally, 60.7% participants find the timing of services inconvenient, 57.3% report drug unavailability, and 58.3% encounter unclean environments. 60.7% lack access to female doctors, and 59.7% do not receive adequate health explanation.

SECTION 4:

Description of Facilitators in Utilization of selected Maternal and Child Health Schemes.

This section deals with Facilitators in Utilization of selected Maternal and Child Health Schemes.

Table 7: Distribution of Facilitators in Utilization of selected Maternal and Child Health Schemes.

n = 206

Domain	**Questions**	**Frequency(f)** of **Yes** response	**Percentage(%)** of **Yes** response
1. Socio-economical	The proximity of health center is near to my residence.	116	56.3
	Healthcare centers provide health facilities(medicine/investigation) free of cost.	114	55.3
	Existence of no financial issues to access these facilities.	119	57.8
2. educational	You have knowledge about existing scheme.	113	54.9
4. Personal	You experienced any positive interactions with the healthcare center in the past.	116	56.3
	Your husband accepts the facilities provided by health center.	140	68
	You accompany by any health professional to reach the health center.	118	57.3
	Your family support you to access the facilities provided under health care schemes	108	52.4
5.Health centre related problem	Health center have adequate healthcare staff.	109	52.9
6. Health Professionals	Health Professionals provide counselling for these health schemes.	125	60.7

	Health professionals demonstrate acceptable and proper behavior.	113	54.9

Interpretation: The data depicted in Table 7 shows key facilitators for healthcare scheme utilization. Socio-economically, 56.3% find the health center's proximity convenient, 55.3% receive free health facilities, and 57.8% face no financial barriers. Educationally, 54.9% are aware of existing schemes. Personally, 56.3% experienced positive interactions with healthcare centers, 68% have supportive husbands, 57.3% are accompanied by health professionals, and 52.4% receive family support. Additionally, 52.9% believe the health centers have adequate staff, and 60.7% receive counseling from health professionals who demonstrate acceptable behavior (54.9%). These factors collectively enhance the effective utilization of healthcare schemes.

SECTION 5:

Description of association between socio-demographic variables and barriers and facilitators in utilization of selected Maternal and Child Health Schemes.

This section deals with association between socio-demographic variables and barriers and facilitators in utilization of selected Maternal and Child Health Schemes.

Table 8: Association between socio-demographic variables and barriers in utilization of selected Maternal and Child Health Schemes.

Association between barriers and socio-demographic variable															
	Socio- economical						Educational			Culture & language					
	Good transport is available to reach the healthcare center.			The cash incentives have been transferred to your bank account in due time.			You attended any awareness program related to health schemes.			Health professionals communicate in your understandable language.			Health professionals respect your cultural values.		
Variables	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value
1. Age (in years)	2	.31	.85	2	.50	.77	2	2.73	.25	2	4.75	.09	2	.47	.79
2.Religion	2	.50	.77	2	7.01	.03*	2	.57	.75	2	.13	.93	2	.27	.87
3.Socio economic class	3	1.55	.67	3	3.78	.28	3	1.10	.77	3	1.06	.78	3	5.57	.13
4.Residence	1	.17	.68	1	.95	.32	1	.07	.78	1	.04	.84	1	3.33	.07
5.Type of family	2	6.17	.06	2	.99	.61	2	1.03	.60	2	1.50	.48	2	2.24	.33

6.Duration of marriage	3	.07	.99	3	14.32	.002*	3	1.86	.60	3	1.65	.65	3	7.50	.06
7.Number of children	1	.05	.82	1	.05	.83	1	.85	.35	1	.01	.91	1	.17	.67
8.Educational status of mother	3	1.89	.60	3	.53	.91	3	2.16	.54	3	7.21	.06	3	1.50	.68

	Personal			Health centre related problem											
	Timing schedule of the health care center convenient for you.			The government makes payments as specified by the health schemes.			You need not wait for Health facilities at the health centers			You find adequate accessibility of benefits related to maternal health care schemes at health care center			Prescribed drugs/investigations are available at the health center.		
Variables	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value
1. Age (in years)	2	2.75	.25	2	2.13	.34	2	1.98	.37	2	1.13	.56	2	2.49	.28
2.Religion	2	.46	.79	2	.07	.96	2	2.27	.32	2	.21	.90	2	3.76	.15
3.Socio economic class	3	2.87	.41	3	1.87	.60	3	2.92	.40	3	3.02	.39	3	1.07	.78
4.Residence	1	1.14	.28	1	.14	.71	1	.15	.69	1	.04	.83	1	.31	.57
5.Type of family	2	8.07	.07	2	1.85	.39	2	2.78	.25	2	2.75	.25	2	.19	.91
6.Duration of marriage	3	.28	.96	3	5.82	.12	3	3.35	.34	3	2.28	.51	3	1.69	.64
7.Number of children	1	.89	.34	1	.19	.66	1	1.95	.16	1	.76	.38	1	.23	.63

8.Educational status of mother	3	2.61	.45	3	4.73	.19	3	9.57	.02*	3	9.52	.02*	3	5.59	.13

	Health centre related problem			Health Professionals					
	The environment at the healthcare center clean and hygienic			Female doctor is available at the health center.			You receive explanation and teaching about health condition at health care center.		
Variables	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value
1. Age (in years)	2	2.77	.25	2	2.75	.25	2	.79	.67
2.Religion	2	3.64	.16	2	.70	.70	2	2.26	.32
3.Socio economic class	3	4.14	.25	3	1.30	.73	3	7.91	.05*
4.Residence	1	1.23	.27	1	1.14	.28	1	.23	.63
5.Type of family	2	.34	.84	2	2.88	.24	2	.41	.81
6.Duration of marriage	3	3.27	.35	3	1.34	.72	3	4.64	.20
7.Number of children	1	.84	.36	1	.44	.51	1	.13	.71
8.Educational status of mother	3	3.82	.28	3	2.72	.43	3	4.19	.24

***Significance at 0.05 level**

Interpretation:

Barriers Association (P-value <0.05)

- Religion was significantly associated with cash incentives (χ^2=7.01, p=0.03).
- Duration of marriage was significantly associated with cash incentives (χ^2=14.32, p=0.002).
- Mother's education was significantly associated with waiting times at health centers (χ^2=9.57, p=0.02) and accessibility to maternal healthcare benefits (χ^2=9.52, p=0.02).
- Socio-economic class was significantly associated with receiving explanation and teaching about health conditions (χ^2=7.91, p=0.05).

Hence null hypothesis ($H_{01)}$ is rejected at 0.05 level of significance.

Table 9: Association between socio-demographic variables and Facilitators in utilization of selected Maternal and Child Health Schemes.

Association between facilitators and socio-demographic variable															
	Socio- economical									Educational			Personal		
	The proximity of health center is near to my residence.			Healthcare centers provide health facilities(medicine/investigation) free of cost.			Existence of no financial issues to access these facilities.			You have knowledge about existing scheme.			You experienced any positive interactions with the healthcare center in the past.		
Variables	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value
1. Age (in years)	2	2.02	.36	2	.81	.67	2	.09	.95	2	5.14	.8	2	1.15	.56
2.Religion	2	.21	.90	2	3.25	.19	2	4.10	.12	2	.93	.62	2	1.93	.38
3.Socio economic class	3	.71	.87	3	2.57	.46	3	4.99	.17	3	12.26	.07	3	7.62	.06
4.Residence	1	.09	.77	1	1.87	.17	1	.19	.66	1	2.52	.11	1	2.02	.15
5.Type of family	2	.85	.65	2	4.98	.08	2	2.32	.31	2	.24	.88	2	12.73	.00*
6.Duration of marriage	3	6.64	.08	3	1.93	.59	3	3.42	.33	3	5.30	.15	3	.94	.82

7.Number of children	1	.42	.52	1	1.71	.19	1	.05	.83	1	1.17	.28	1	.22	.63
8.Educational status of mother	3	.89	.82	3	9.45	.02*	3	4.93	.17	3	2.54	.47	3	2.98	.34

	Personal									Health centre related problem		
	Your husband accepts the facilities provided by health center.			You accompany by any health professional to reach the health center.			Your family support you to access the facilities provided under health care schemes			Health center have adequate healthcare staff		
Variables	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value
1. Age (in years)	2	3.40	.19	2	.38	.82	2	3.25	.19	2	3.32	.19
2.Religion	2	.13	.93	2	.21	.90	2	5.37	.07	2	2.53	.28
3.Socio economic class	3	2.01	.56	3	1.50	.68	3	1.70	.64	3	7.53	.06
4.Residence	1	.05	.94	1	.08	.77	1	4.20	.07	1	1.12	.29
5.Type of family	2	2.45	.28	2	1.96	.37	2	1.38	.50	2	5.35	.07
6.Duration of marriage	3	.88	.83	3	.83	.84	3	1.99	.57	3	9.80	.07
7.Number of children	1	4.32	.04*	1	.23	.63	1	.52	.47	1	.28	.60
8.Educational status of mother	3	1.70	.64	3	1.26	.73	3	1.53	.67	3	3.42	.33

	Health Professionals	
	Health Professionals provide counseling for these health schemes.	Health professionals demonstrate acceptable and proper behavior.

Variables	Df	Chi-Square (χ^2) Value	P-value	Df	Chi-Square (χ^2) Value	P-value
1. Age (in years)	2	.49	.78	2	1.38	.50
2.Religion	2	.28	.87	2	3.96	.13
3.Socio economic class	3	1.01	.80	3	3.77	.29
4.Residence	1	.04	.83	1	1.48	.22
5.Type of family	2	1.94	.38	2	.31	.85
6.Duration of marriage	3	3.44	.32	3	.84	.84
7.Number of children	1	.58	.44	1	1.35	.25
8.Educational status of mother	3	.65	.89	3	2.18	.54

***Significance at 0.05 level**

Interpretation:

Facilitators Association (P-value <0.05)

- Mother's education was associated with free health facilities (χ^2=9.45, p=0.02).
- Type of family was significantly associated with positive interactions at healthcare centers (χ^2=12.73, p=0.002).
- Number of children was associated with husbands' acceptance of health facilities (χ^2=4.32, p=0.04).

Hence null hypothesis (H_{02}) is rejected at 0.05 level of significance.

Table 10: Logistic Regression for selected Barriers with selected socio-demographic variables

Logistic Regression for selected Barriers with selected socio-demographic variables (P-value <0.05)									
		Socio-economical		Health Professionals		Health centre related problem			
		The cash incentives have been transferred to your bank account in due time.		You receive explanation and teaching about health condition at health care center.		You need not wait for Health facilities at the health centers		You find adequate accessibility of benefits related to maternal health care schemes at health care center	
Vaiables	**Categories**	**AOR (95% CI)**	**P-value**	**AOR (95% CI)**	**P-value**	**AOR (95% CI)**	**P-value**	**AOR (95% CI)**	**P-value**
Religion	Hindu	4.9(1.37;17.78)	.01						
	Muslim	4.2(1.12;15.74)	.03						
	Christian	Reference							
Socio economic class	Upper			1.5(0.47;4.72)	.49				
	Upper middle			2.7(1.12;6.53)	.03				
	Lower middle			3.3(1.27;8.97)	.01				
	Upper lower			Reference					
Duration of marriage	<1 year	0.2(0.02;1.79)	.15						
	1-2 years	3.3(1.54;7.13)	.00						
	2-3 years	1.1(0.58;2.20)	.71						
	>3 years	Reference							
Educational status of mother	Illiterate					0.1(0.1;1.29)	.08	.1(0.01;0.70)	.02
	Primary education					0.5(0.22;1.01)	.05	.5(0.27;1.18)	.13
	Secondary/higher education					.87(0.51;2.23)	.87	.4(0.20;0.92)	.03
	Diploma/graduation					Reference		Reference	

Interpretation:

Barriers Analysis (P-value <0.05)

Hindu mothers were 4.9 times more likely and Muslim mothers were 4.2 times more likely to face delays in receiving cash incentives compared to Christian mothers. [AOR-4.9, CI (1.37;17.78)] [AOR-4.2, CI (1.12;15.74)]

Women from the upper middle class were 2.7 times more likely, and those from the lower middle class were 3.3 times more likely to not receive proper explanations or teaching about their health conditions compared to those from the upper lower class. [AOR-2.7, CI (1.12;6.53)] [AOR-3.3, CI (1.27;8.97)]

Women married for 1-2 years were 3.3 times more likely to face delays in receiving cash incentives compared to those married for more than 3 years. [AOR-3.3, CI (1.54;7.13)]

Primary education mothers were 0.5 time more likely to experience long waiting times for healthcare services compared to diploma/graduate mothers. [AOR-0.5, CI (0.22;1.01)]

Illiterate mothers were 0.1 time more likely to find it difficult to access maternal healthcare benefits compared to diploma/graduate mothers. [AOR-0.1, CI (0.01;0.70)],

Table 11: Logistic Regression for selected Facilitators with selected socio-demographic variables

Logistic Regression for selected facilitators with selected socio-demographic variables (P-value <0.05)									
		Socio-economical		Educational		Personal			
		Healthcare centers provide health facilities(medicine/investigation) free of cost.		You have knowledge about existing scheme.		You experienced any positive interactions with the healthcare center in the past		Your husband accepts the facilities provided by health center.	
Variable	**categories**	**AOR (95% CI)**	**P-value**	**AOR (95% CI)**	**P-value**	**AOR (95% CI)**	**P-value**	**AOR (95% CI)**	**P-value**
Socio economic class	Upper			.7(0.25; 2.02)	.52				
	Upper middle			.8(0.36; 1.80)	.60				
	Lower middle			.2(0.10; 0.64)	.00				
	Upper lower			Reference					
Type of family	Nuclear					1.7(0.86; 3.43)	.12		
	Joint					3.9(1.82; 8.76)	.00		
	Extended					Reference			
Number of children	1							1.8(1.03; 3.39)	.04
	>1							Reference	
Educational status of mother	Illiterate	11.4(1.31; 98.59)	.03						
	Primary education	1.6(0.77; 3.34)	.21						
	Secondary/higher education	2.4(1.12; 5.15)	.02						
	Diploma/graduation	Reference							

Interpretation:

Facilitators Analysis (P-value <0.05)

- Women from the lower middle class were 0.2 time more likely to use free healthcare services compared to those from the upper lower class. [AOR-0.2, CI (0.10;0.64)]
- Women from joint families were 3.9 times more likely to know about existing healthcare schemes compared to those from extended families. [AOR-3.9, CI (1.8;2)]
- Mothers with only one child were almost 1.8 times more likely to have had a positive past experience with healthcare centers compared to those with more than one child. [AOR-1.8, CI (1.03;3.39)]
- Illiterate mothers were 11.4 times more likely to accept healthcare facilities compared to those with a diploma or graduation. [AOR-11.4, CI (1.31;98.59)]
- Mothers with secondary or higher education were 2.4 times more likely to accept healthcare facilities compared to those with a diploma or graduation. [AOR-2.4, CI (1.12;5.15)]

Summary:

This chapter deals with the statistical interpretation of participants responses on account for distribution of utilization of selected NHM schemes, barriers and facilitators in utilization of selected schemes**,** and their association with selected socio-demographic variables. Association found with some socio demographic variables like age, religion, type of family etc.

CHAPTER-5

DISCUSSION

CHAPTER V

DISCUSSION

This chapter provides a brief discussion about major findings, discussion, implications to nursing, limitations, conclusion and future recommendations of the present study.

Major findings of the study:

SECTION 1: Socio-demographic Characteristics of participants.

SECTION 2: Utilization of MCH Schemes and selected MCH Schemes under NHM

SECTION 3: Barriers in utilization of selected Maternal and Child Health Schemes.

SECTION 4: Facilitators in Utilization of selected Maternal and Child Health Schemes.

SECTION 5: Association between socio-demographic variables and barriers and facilitators in utilization of selected Maternal and Child Health Schemes.

SECTION 1: Description of Socio-demographic Characteristics participants.

The study participants primarily aged 20-30 years (52.9%) with no participants over 40. Predominantly Hindu (57.3%), it includes Muslims (33.0%) and Christians (9.7%). Most participants fall within the Upper Middle class (48.1%) and reside in Barkhera Pathani (53.4%) or Saibaba Nagar PHC (46.6%). Nuclear families are the most common (44.2%). Nearly half have been married for over three years (47.6%), with an even split between having one child (51.5%) and more than one (48.5%). Mothers' education ranges from illiterate (4.4%) to diploma/graduation (22.3%).

SECTION 2: Description of Utilization of MCH Schemes and selected MCH Schemes under NHM

The data on healthcare scheme utilization indicates full participation in JSY (Janani Suraksha Yojana) and JSSK (Janani Shishu Suraksha Karyakram), achieving 100% coverage. Conversely, the SUMAN (Surakshit Matratva Ashwasan) scheme shows lower utilization at 42.2%, reflecting potential barriers or gaps in awareness and access. The Extended PMSMA (Pradhan Mantri Surakshit Matritva Abhiyan) has even lower uptake, with only 17% participation, suggesting significant challenges in its implementation. These findings underscore the need for targeted efforts to improve the reach and effectiveness of SUMAN and PMSMA schemes, ensuring broader accessibility and utilization for better maternal and child health outcomes.

The analysis of JSY (Janani Suraksha Yojana) scheme utilization reveals that 74.8% received institutional delivery counseling, 84.5% obtained incentives for institutional delivery, and 74.8% did not incur delivery charges. For SUMAN (Surakshit Matratva Ashwasan), 59.2% had to pay health service charges during pregnancy and delivery, while 60.2% faced denial of health facilities at the health center. Additionally, 39.8% received cash incentives under SUMAN. This data underscores the effective utilization of JSY benefits but highlights significant gaps in SUMAN's implementation

SECTION 3: Description of Barriers in utilization of selected Maternal and Child Health Schemes.

The findings showed that 56.8% face issues with transport to healthcare centers, while 57.8% experience delays in receiving cash incentives. 57.3% did not attend health awareness programs, and 53.4% face communication challenges with health professionals. 50.5% feel their cultural values are not respected. Additionally, 60.7%

find the timing of services inconvenient, 57.3% report drug unavailability, and 58.3% encounter unclean environments. 60.7% lack access to female doctors, and 59.7% do not receive adequate health explanation.

SECTION 4: Description of Facilitators in Utilization of selected Maternal and Child Health Schemes.

The data highlights key facilitators for healthcare scheme utilization. Socio-economically, 56.3% find the health center's proximity convenient, 55.3% receive free health facilities, and 57.8% face no financial barriers. Educationally, 54.9% are aware of existing schemes. Personally, 56.3% experienced positive interactions with healthcare centers, 68% have supportive husbands, 57.3% are accompanied by health professionals, and 52.4% receive family support. Additionally, 52.9% believe the health centers have adequate staff, and 60.7% receive counseling from health professionals who demonstrate acceptable behavior (54.9%). These factors collectively enhance the effective utilization of healthcare schemes.

SECTION 5: Description of association between socio-demographic variables and barriers and facilitators in utilization of selected Maternal and Child Health Schemes.

Religion and duration of marriage were significantly associated with delays in receiving cash incentives ($p < 0.05$). Mother's education was significantly linked to waiting times at health centers, accessibility to maternal healthcare benefits, and free health facilities ($p < 0.05$).Type of family was associated with positive interactions at healthcare centers ($p = 0.002$).Number of children was associated with husbands' acceptance of health facilities ($p = 0.04$).

Hindu 5 times and Muslim mothers 4 times were more likely to face delays in cash incentives than Christians. Lower middle and upper middle-class women 3 times were more likely to not receive proper explanations about health conditions. Women from joint families 4 times were more likely to know about existing healthcare schemes. Mothers with one child 2 times were more likely to have positive past healthcare experiences. Illiterate mothers 11 and those with secondary/higher education 2 were more likely to accept healthcare facilities.

Discussion

1. Socio demographic data of study

The demographic characteristics of the study population closely align with findings from existing literature while also presenting notable differences. The majority of participants in study were aged 20–30 years (52.9%), consistent with the findings [(4)], where 54.1% of respondents fell within this age range. However, unlike [(11)], who reported that 18.2% of their participants were above 40 years.

In terms of religious distribution, study population was predominantly Hindu (57.3%), followed by Muslims (33.0%) and Christians (9.7%). This differs from Ochako et al. (2014) [(14)], who found a Christian majority (60.1%) in Kenya, with Muslims comprising 28.3%, suggesting that religious composition varies significantly based on regional and cultural contexts.

The socioeconomic status of participants revealed that nearly half (48.1%) belonged to the Upper Middle class. This contrasts identified a larger proportion of respondents (61.4%) from lower-income backgrounds, [(1)] highlighting economic disparities that may influence healthcare access and utilization across different study settings.

Regarding family structure, study found that nuclear families were the most common (44.2%). This finding is comparable [8], where 46.3% of participants lived in nuclear households.

Marital duration findings indicate that 47.6% of participants had been married for over three years, aligning with who reported a similar figure of 49.8%. [10]

In the study, 4.4% of participants were illiterate, while 22.3% had completed a diploma or graduation. In contrast, [11] found a higher proportion of illiterate women (19.1%) and a lower percentage of those with higher education (15.7%).

2 Discussion of Barriers in utilization of selected Maternal and Child Health Schemes.

The study found that 56.8% of participants face transportation barriers in accessing healthcare. This aligns with [1],who reported that 55-65% of women in low- and lower-middle-income countries experience transportation difficulties. Similarly, [14] found that 57% of Kenyan women identified transportation as a key obstacle in accessing antenatal care.

The study shows that 57.8% of respondents experienced delays in receiving cash incentives. This is slightly higher than [5] who found that 52% of women in Pakistan faced issues with financial incentives. Singh & Rajak [20] also reported similar findings, with delays affecting nearly 55% of women in India's maternal healthcare system.

The study result indicates that 57.3% of respondents did not attend health awareness programs. This is consistent with the Burnet Institute (2015) [8], which found that 54% of women in four lower-income countries lacked access to health education sessions.

Similarly, [7] reported that nearly 60% of maternal health program beneficiaries were not adequately informed about healthcare services.

The study found that 53.4% of participants faced communication difficulties with healthcare professionals. Study [9] reported that 51% of women in maternal health programs had difficulty understanding medical instructions.

The study reports that 50.5% of participants felt their cultural values were not respected. Study [4] found a slightly higher percentage (58%) of Ethiopian women citing cultural insensitivity as a major deterrent to maternal health service utilization.

The study found that 60.7% of participants experienced issues with service timing. Fadlallah et al. (2020) [10] reported that 62% of women in low-income settings found health service hours inconvenient. Similarly noted that rigid healthcare schedules were a barrier for 59% of women in the Democratic Republic of Congo. [21]

The study found that 57.3% of participants experienced drug shortages. Study reported that 55-60% of healthcare facilities in the Democratic Republic of Congo had frequent medicine shortages. [21] Study found similar results, with 56% of respondents in low-income countries struggling with medication access. [17]

The study indicates that 58.3% of respondents encountered unclean hospital conditions. Study found a slightly lower figure, reporting that 55% of women worldwide avoided maternal health services due to poor hygiene. [3]

The study found that 60.7% of participants lacked access to female doctors. This is higher than Singh & Rajak (2024) [10], who reported that 58% of Indian women preferred female healthcare providers but faced shortages. Similarly found that 59% of women in their study cited the absence of female doctors as a major concern. [12]

The study found that 59.7% of participants did not receive adequate health explanations. Similarly reported a comparable finding, with 60% of women in their study indicating poor communication from healthcare providers.[12] Study also noted that 58-62% of women in low-income countries struggled with insufficient health education.[1]

3.Discussion of Facilitators in Utilization of selected Maternal and Child Health Schemes.

The proximity of health centers (56.3%) as a facilitating factor is consistent with ,who found that 55-60% of women in low- and lower-middle-income countries benefited from easily accessible healthcare facilities.[1] Additionally, reported that 58% of Kenyan women attended antenatal care due to the convenience of nearby facilities.[13]

The study found that 55.3% of respondents received free health services, which aligns where 54% of participants in Pakistan utilized maternal health services due to cost-free facilities. [6] Similarly, reported that financial aid schemes improved healthcare access for 56% of Indian women. [11]

Financial security was another important facilitator, with 57.8% of your respondents facing no financial barriers. This finding mirrors [17], who noted that economic support significantly influenced healthcare use in 56% of cases. Burnet Institute (2015) also reported that economic stability encouraged 58% of participants to seek maternal healthcare.[8]

Awareness of healthcare schemes was reported by 54.9% of respondents, similar to where 55-60% of participants in low-income countries were aware of available maternal health services. [21]

Husband support was a major facilitator in the study, with 68% of respondents having supportive spouses. Study reported a similar pattern, with 65% of Ethiopian women citing partner support as a motivator for accessing maternal health services.[4] Similarly also found that male involvement positively influenced healthcare access for 67% of women.[11]

Health professionals accompanying 57.3% of respondents is consistent where 56% of participants benefited from direct guidance by medical staff. [15] Similarly, Ochako et al. (2014) reported that 58% of women in Kenya felt more comfortable accessing care when assisted by professionals.[14]

Family support was received by 52.4% of respondents, which closely matches findings from Maternal Health Task Force (2017) where 53% of women relied on family encouragement for maternal healthcare visits.

The study found that 60.7% of respondents received counselling from healthcare professionals, aligning with study who reported that 62% of women in low-income settings received similar guidance.[10]

While 52.9% of respondents believed that health centers had adequate staff, similarly found that only 47% of healthcare facilities in the Democratic Republic of Congo had sufficient personnel, suggesting a regional difference in staffing levels.[5]

Acceptable behavior from healthcare professionals was noted by 54.9% of respondents in The study. In contrast, found that only 49% of women worldwide reported respectful treatment from healthcare staff. [3]

4 Association between socio-demographic variables and barriers and facilitators in utilization of selected Maternal and Child Health Schemes.

Hindu and Muslim mothers facing delays in receiving cash incentives align with findings from [1], which highlighted financial challenges in low-income countries affecting timely disbursement of maternal health incentives.

The association of socio-economic class with inadequate explanation about health conditions is consistent with [4], which reported that lower economic groups often experience communication gaps with healthcare providers. Similarly, identified financial constraints as a major determinant of healthcare utilization in low-income settings.[5]

Women married for 1-2 years being more likely to face delays in receiving cash incentives contrasts with 5, which found that newly married women were more aware of maternal health benefits and had better financial access due to family support.

Mothers with primary education experiencing longer waiting times at healthcare centers is supported by findings from [7], which reported that lower educational levels correlate with poorer navigation of healthcare systems.

The study finding that joint family mothers were more likely to be aware of healthcare schemes is in line which suggested that family structures influence awareness and utilization of maternal health services.[9]

Limitations of the study

- The study used convenient sampling, so the findings may not apply to all women in Bhopal or other areas.
- Participants shared information based on memory, which might not always be accurate or completely honest.

- Women who didn't speak Hindi or English were excluded, missing the perspectives of those who speak other languages.
- The study only covered certain urban areas of Bhopal, so it doesn't reflect the situation in rural or other urban areas.
- Since data was collected only once, the study doesn't show how barriers and facilitators might change over time.
- Only some maternal and child health schemes were studied, which may leave out issues related to other programs.

Implications of the Study

1. **For Public Health Services:**
    - Improving Healthcare Access – Enhancing transportation, timely cash incentives, flexible service hours, drug availability, hygiene, and female doctor accessibility can strengthen service delivery.
    - Enhancing Patient Engagement – Effective communication, cultural sensitivity, and comprehensive health education can improve awareness, trust, and healthcare utilization.
2. **For Policymakers:**
    - The findings can guide decision-makers to focus on improving transport, ensuring timely cash payments, and providing enough staff and supplies.
    - Policies should address cultural and social factors to make healthcare schemes more inclusive.
3. **For Future Research:**

- This study highlights problems that need more attention, such as finding better ways to reach women in remote areas.
- It encourages more research into creating innovative and practical solutions for maternal healthcare.

4. **For Communities:**

- Education and family support are key to improving healthcare access. Empowering women and involving families in health decisions will make the use of healthcare schemes easier and more effective.

Conclusion-

Study highlights disparities in the utilization of maternal and child health schemes in urban Bhopal. While JSY and JSSK have full coverage, SUMAN and PMSMA remain underutilized. Addressing barriers such as transport limitations, delays in cash incentives, and shortages of female doctors can enhance the effectiveness of these schemes. Strengthening healthcare policies and improving service accessibility can contribute to better maternal and child health outcomes, aligning with the Sustainable Development Goals (SDGs).

Recommendations

Based on the findings and limitations of the study, the researcher proposes the following recommendations:

- Conducting similar studies as multicentric research with a larger participants size and an extended time frame.

- Qualitative and mixed method studies can be carried out for in-depth exploration and understanding barriers and facilitators in utilization of MCH schemes.
- Conducting similar study in rural areas to compare factors in rural and urban areas.
- Conduct descriptive studies which included females who are in early postnatal period to collect more effective memorised data from participants.

Summary

The chapter interprets the key findings of the study, linking and comparing them to the existing literature. It discusses the similar and contrasting results from other studies. The chapter also covers the limitations and implications of the study and provide recommendations for further research.

REFERENCES

REFERENCES

1. Sarikhani Y, Najibi SM, Razavi Z. Key barriers to the provision and utilization of maternal health services in low-and lower-middle-income countries: A scoping review. *BMC Womens Health*. 2024;24:177.
2. Gupta V, Singh A, Palaniyandi S, Palaniyandi A, Panika R, Mahore R, et al. A cross-sectional study to assess the utilization pattern of maternal health services and associated factors in aspirational district of Haryana, India. *J Family Med Prim Care*. 2021;10(8):2879.
3. Nair M, Yoshida S, Lambrechts T. Facilitators and barriers to quality of care in maternal, newborn, and child health: A global situational analysis through meta-review. *BMJ Open*. 2014;4(5):e004749.
4. Yoseph A, Teklesilasie W, Guillen-Grima F, Astatkie A. Perceptions, barriers, and facilitators of maternal health service utilization in southern Ethiopia: A qualitative exploration. *PLOS ONE*. 2024;19(1):e0312484.
5. Duff R, Patel F, Dumouza A. Facilitators and barriers to supply-side maternal, newborn, and child health service availability in the Democratic Republic of the Congo: A systematic review. *J Glob Health Econ Policy*. 2024;5(2):117361.
6. Soofi SB. Community perceptions of facilitators and barriers to maternal and child health service use: Implementation research from the Maternal, Neonatal Child Health Services Project in District Dadu, Sindh, Pakistan. *The Aga Khan University, Pakistan*. 2022.
7. Maternal Health Task Force. Facilitators and barriers to engaging communities in maternal and newborn health programs. *Maternal Health Task Force*. 2017.
8. Burnet Institute. Barriers, facilitators, and priorities for implementation of WHO maternal and perinatal health guidelines in four lower-income countries: A GREAT Network research activity. *Burnet Institute*. 2015.
9. Lewin S, Munabi-Babigumira S, Glenton C. Barriers and facilitators to the implementation of lay health worker programs for maternal and child health: A systematic review. *Cochrane Database Syst Rev*. 2010.
10. Fadlallah R, El-Jardali F, Nomier D. Barriers and enablers for implementation of clinical practice guidelines in low- and middle-income countries: A systematic review. *PLOS ONE*. 2020;15(6):e0234258. Available from: https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0234258
11. Singh S, Rajak R. Barriers in utilization and provisioning of obstetric care services in India: A mixed-methods systematic review. *BMC Pregnancy Childbirth*. 2024;24:16.

12. Glenton C, Colvin CJ, Carlsen B, et al. Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: Qualitative evidence synthesis. *Cochrane Database Syst Rev*. 2013;2013(10):CD010414.

13. Fadlallah R, El-Jardali F, Nomier D, et al. Barriers and enablers for implementation of clinical practice guidelines in low- and middle-income countries: A systematic review. *PLOS ONE*. 2019;14(4):e0216536.

14. Ochako R, Fotso JC, Ikamari L, Khasakhala A. Factors influencing the utilization of antenatal care services in Kenya. *BMC Pregnancy Childbirth*. 2014;14:1.

15. Bright T, Wallace S, Kuper H. A systematic review of access to general healthcare services for people with disabilities in low and middle-income countries. *Int J Environ Res Public Health*. 2018;15(9):1879. Available from: https://www.mdpi.com/1660-4601/15/9/1879

16. Lee H, Park SJ, Ndombi GO, Nam EW. Community-based maternal and child health project on 4+ antenatal care in the Democratic Republic of Congo: A difference-in-differences analysis. *Reprod Health*. 2019;16:123.

17. Pantoja T, Opiyo N, Lewin S, et al. Implementation strategies for health systems in low-income countries: An overview of systematic reviews. *Cochrane Database Syst Rev*. 2017;2017(9):CD011086.

18. Thakur R, et al. Discrimination in maternal health services. *Soc Med J*. 2019.

19. Gupta P, et al. Impact of COVID-19 on maternal health services. *Pandemic Health Res J*. 2021.

20. Garg R, et al. Conditional cash transfers as facilitators of maternal health utilization. *Econ Policy J*. 2020.

21. Das M, et al. The role of digital technology in maternal health promotion. *Glob Health J*. 2022.

22. National Family Health Survey (NFHS-5) [Internet]. Available from: http://rchiips.org/nfhs/factsheet_NFHS-5.shtml

23. World Health Organization. Structural barriers to maternal healthcare access in LMICs. *Glob Health Rep*. 2021.

24. Sustainable Development Goal (SDG) Target 3.1 Maternal mortality [Internet]. [cited 2025 Feb 2]. Available from: https://www.who.int/data/gho/data/themes/topics/sdg-target-3-1-maternal-mortality

25. Kalia R, Pareek B. *Textbook of Nursing Research and Biostatistics*. 1st ed. Health Science; 2020. p.117.

26. Sharma SK. *Nursing Research and Statistics*. Elsevier; 2012. p.178.

27. National Center for Biotechnology Information. Nursing research methodology [Internet]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK606120/

ANNEXURE

ANNEXURE 1

Tool for data collection:

DESCRIPTION OF SCREENING TOOL

Screening tool-Screening tool is self-structured consisting of questions. These questions will be asked to the participants.

1. What is your current age?
2. Age of your youngest child?
   a) <1 year
   b) >1year
3. Are you diagnosed with any critical illness?
   a) Yes
   b) No
   c) If yes, then specify ----------
4. Are you able to understand and speak Hindi, English or both languages?
   a) Yes
   b) No

Eligible for The study - [ ] YES [ ] NO

ANNEXURE 2

Tool for data collection

Using pertinent literature, a self-structured interview Schedule developed consisting of three sections. The questions will be assessed by face interview technique.(the researcher will ask the question):Section A covers socio-demographic variables of women; Section B encompasses Utilization of NHM schemes; Section C covers Barriers and Facilitators in the utilization of schemes.

Instructions: **Code no.** ☐

- Please listen careful and it is compulsory to answer all the questions given below.
- All the data collected will be used only for the research purpose.
- The confidentiality of all the information collected will be ensured.

Section A: socio-demographic variables of women

1. Age (in years)	
2. RELIGION A. Hindu B. Muslim C. Christian D. Other (Specify) _____	
3. Socio economic class (Modified Kuppuswamy socioeconomic scale 2023) Upper(I) Upper middle (II) Lower middle (III) Upper lower (IV) Lower (V) i). EDUCATIONAL class (Modified Kuppuswamy socioeconomic scale 2023) A) Professional degree B) Graduate C) Intermediate/ diploma D) High school E) Middle school	

F) Primary School G) Illiterate ii). OCCUPATION class (Modified Kuppuswamy socioeconomic scale 2023) A. Legislators, senior officials, managers B. Professionals C. Technicians/associate professionals D. Clerks E. Skilled workers, shop and market sales workers F. Skilled agricultural and fishery workers G. Crafts and related trade workers H. Plant and machine operators and assemblers I. Elementary occupation J. Unemployed	
iii). FAMILY INCOME IN RUPEES class (Modified Kuppuswamy socioeconomic scale 2023) A. >146,104 B. 109,580-146,103 C. 73,054- 109,579 D. 68,455- 73,053 E. 63,853- 68,454 F. 59,252- 63,853 G. 54,651-59,251 H. 45,589- 54,650 I. 36,527- 45,588 J. 21,914- 36,526 K. 7316- 21,913 L. <= 7315	
4. RESIDENCE A) Civil Dispensary cum Sanjeevani Clinic, Barkhera Pathani B) Saibaba Nagar PHC	
5. TYPE OF FAMILY A) Nuclear B) Joint C) Extended	
7. DURATION OF MARRIAGE A) <1 year B) 1-2 years C) 2-3 years D) >3 years	

8. Number of children A) 1 B) >1	
9. Educational status of mother A) Illiterate B) Primary education (upto 5th standard) C) Secondary/higher education(upto 12th standard) D) Diploma/graduation	

Section B. Utilization of NHM schemes too

Part a: Utilization of MCH schemes under NHM

Schemes	**Yes**	**No**
1. JSY (Janani Suraksha Yojana)		
2.JSSK (Janani Shishu Suraksha Karyakram)		
3.SUMAN(Surakshit Matratva Ashwasan)		
4. Extended PMSMA(Pradhan Mantri Surakshit Matritva Abhiyan)		
5. IMNCI (Integrated Management of Neonatal and Childhood Illness)		
6. NSSK(Navjat Shishu Suraksha Karyakram)		

Part b: Utilization of selected MCH schemes under NHM

SCHEME	**Benefits Utilized**	**YES**	**NO**
1. JSY	i. You got institutional delivery counseling by any health professional.		
	ii. You got any incentive for institutional delivery under this scheme.		
	iii. You need to pay any charges during delivery.		
2.SUMAN	i. You pay any health service charges during pregnancy and delivery.		

	ii.	You find any denial in providing health facilities at the health center.		
	iii.	You got any cash incentive under this scheme.		

Section C: Tool to assess BARRIERS and FACILITATORS in utilization of selected MCH schemes

S.no	Questions	Yes	No
Socio-economical	The proximity of health center is near to residence.		
	Good transport is available to reach the healthcare center.		
	The cash incentives have been transferred to bank account in due time.		
	Healthcare centers provide health facilities(medicine/investigation) free of cost.		
	Existence of no financial issues to access these facilities.		
Educational	You have knowledge about existing cheme.		
	You attended any awareness program related to health schemes.		
Culture & language	Health professionals communicate in your understandable language.		
	Health professionals respect your cultural values.		
Personal	Timing schedule of the maternal health care clinic convenient for you.		
	You experienced any positive interactions with the healthcare center in the past.		
	Your husband accepts the facilities provided by health center.		
	You accompany by any health professional to reach the health center.		
	Your family support you to access the facilities provided under health care schemes.		
Health center related problem	The government makes payments as specified by the health schemes.		
	You need not wait for health facilities at the health centers.		
	You find feasible to access the benefits related to maternal health care schemes at health care center.		
	Prescribed drugs/investigations are available at the health center.		

	The environment at the healthcare center clean and hygienic.		
	Health center have adequate healthcare staff.		
Health Professionals	Health Professionals provide counseling and awareness for these health schemes.		
	Health professionals demonstrate acceptable and proper behavior.		
	Female doctor is available at the health center.		
	You receive explanation and teaching about health condition at health care center.		

ANNEXURE 3

डेटा संग्रह के लिए उपकरण

प्रासंगिक साहित्य का उपयोग करते हुए, एक स्व-संरचित साक्षात्कार अनुसूची विकसित हुई जिसमें तीन खंड शामिल हैं। प्रश्नों का मूल्यांकन फेस इंटरव्यू तकनीक द्वारा किया जाएगा। (शोधकर्ता सवाल पूछेगा): खंड ए महिलाओं के सामाजिक-जनसांख्यिकीय चर को कवर करता है; खंड बी में एनएचएम योजनाओं का उपयोग शामिल है; खंड ग में स्कीमों के उपयोग में बाधाएं और सुविधाप्रदाता शामिल हैं।

निर्देश: कोड नं. ☐

- कृपया ध्यान से सुनें और नीचे दिए गए सभी प्रश्नों का उत्तर देना अनिवार्य है।
- एकत्र किए गए सभी डेटा का उपयोग केवल अनुसंधान उद्देश्य के लिए किया जाएगा।
- एकत्र की गई सभी सूचनाओं की गोपनीयता सुनिश्चित की जाएगी।

खंड ए: महिलाओं के सामाजिक-जनसांख्यिकीय चर

1. आयु (वर्षों में)	
2. धर्म A. हिंदू B. मुस्लिम C. ईसाई D. अन्य (स्पष्ट करें)	
3. सामाजिक-आर्थिक वर्ग (संशोधित कप्पुस्वामी सामाजिक-आर्थिक पैमाना 2023) A) उच्च (I) B) उच्च मध्य (II) C) निम्न मध्य (III) D) उच्च निम्न (IV) E) निम्न (V) i) शैक्षिक वर्ग (संशोधित कप्पुस्वामी सामाजिक-आर्थिक पैमाना 2023) A) पेशेवर डिग्री B) स्नातक C) इंटरमीडिएट/डिप्लोमा D) उच्च विद्यालय E) मध्य विद्यालय F) प्राथमिक विद्यालय	

G) अशिक्षित ii) व्यवसाय वर्ग (संशोधित कप्पुस्वामी सामाजिक-आर्थिक पैमाना 2023) A. विधायकों, वरिष्ठ अधिकारियों, प्रबंधकों B. पेशेवर C. तकनीशियन/सहायक पेशेवर D. लिपिक E. कुशल श्रमिक, दुकान और बाजार बिक्री श्रमिक F. कुशल कृषि और मत्स्य श्रमिक G. शिल्प और संबंधित ट्रेड श्रमिक H. संयंत्र और मशीन ऑपरेटर और असेंबलर I. प्रारंभिक श्रेणी का व्यवसाय J. बेरोजगार	

iii) परिवार की आय (रुपयों में) वर्ग (संशोधित कप्पुस्वामी सामाजिक-आर्थिक पैमाना 2023) A. >146,104 B. 109,580-146,103 C. 73,054-109,579 D. 68,455-73,053 E. 63,853-68,454 F. 59,252-63,853 G. 54,651-59,251 H. 45,589-54,650 I. 36,527-45,588 J. 21,914-36,526 K. 7,316-21,913 L. <=7,315	
4. निवास स्थान A) सिविल डिस्पेंसरी सह संजीवनी क्लिनिक, बारखेड़ा पठानी B) साईबाबा नगर पीएचसी	
5. परिवार का प्रकार A) परमाणु B) संयुक्त C) विस्तारित	

6. विवाह की अवधि A) <1 वर्ष B) 1-2 वर्ष C) 2-3 वर्ष D) >3 वर्ष	
7. बच्चों की संख्या A) 1 B) >1	
8. माँ की शैक्षिक स्थिति A) अशिक्षित B) प्राथमिक शिक्षा (5वीं कक्षा तक) C) माध्यमिक/उच्च शिक्षा (12वीं कक्षा तक) D) डिप्लोमा/स्नातक	

खंड बी. एनएचएम योजनाओं का उपयोग उपकरण

भाग ए: एनएचएम के तहत एमसीएच योजनाओं का उपयोग

योजनाओं	हाँ	नहीं
1. जेएसवाई (जननी सुरक्षा योजना)		
2.जेएसएसके (जननी शिशु सुरक्षा कार्यक्रम)		
3.सुमन(सुरक्षित मात्रत्व अश्वासन)		
4. विस्तारित पीएमएसएमए (प्रधानमंत्री सुरक्षित मातृत्व अभियान)		
5. आईएमएनसीआई (नवजात और बाल्यावस्था रोग का एकीकृत प्रबंधन)		
6. एनएसएसके (नवजात शिशु सुरक्षा कार्यक्रम)		

भाग बी: एनएचएम के तहत चयनित एमसीएच योजनाओं का उपयोग

योजनाओं	उपयोग किए गए लाभ	हाँ	नहीं
1. जेएसवाई	i. आपको किसी स्वास्थ्य पेशेवर द्वारा संस्थागत प्रसव परामर्श मिला है।		
	ii. आपको इस योजना के तहत संस्थागत प्रसव के लिए कोई प्रोत्साहन मिला।		
	iii. आपको डिलीवरी के दौरान कोई भी शुल्क अदा करना होगा।		
2. सुमन	i. आप गर्भावस्था और प्रसव के दौरान किसी भी स्वास्थ्य सेवा शुल्क का भुगतान करते हैं।		
	ii. आपको स्वास्थ्य केंद्र पर स्वास्थ्य सुविधाएं प्रदान करने में कोई कमी नजर आती है।		
	iii. आपको इस योजना के अंतर्गत कोई नकद प्रोत्साहन मिला है।		

खंड सी: चयनित एमसीएच योजनाओं के उपयोग में बाधाओं और सुगमताओं का आकलन करने का उपकरण

क्र.सं.	प्रश्न	हाँ	नहीं
सामाजिक-आर्थिक	स्वास्थ्य केंद्र निवास के नजदीक है।		
	स्वास्थ्य केंद्र तक पहुंचने के लिए अच्छा परिवहन उपलब्ध है।		
	नकद प्रोत्साहन राशि नियत समय पर बैंक खाते में स्थानांतरित कर दी गई है।		
	स्वास्थ्य देखभाल केंद्र निःशुल्क स्वास्थ्य सुविधाएं (दवा/जांच) प्रदान करते हैं।		
	इन सुविधाओं तक पहुँचने के लिए कोई वित्तीय समस्या नहीं है।		
शिक्षात्मक	आपको मौजूदा योजना के बारे में जानकारी है।		
	आपने स्वास्थ्य योजनाओं से संबंधित किसी जागरूकता कार्यक्रम में भाग लिया?		
संस्कृति और भाषा	स्वास्थ्य पेशेवर आपकी समझने योग्य भाषा में संवाद करते हैं।		

	स्वास्थ्य पेशेवर आपके सांस्कृतिक मूल्यों का सम्मान करते हैं।		
निजी	मातृ स्वास्थ्य देखभाल क्लिनिक का समय सारणी आपके लिए सुविधाजनक है।		
	आपने अतीत में स्वास्थ्य सेवा केंद्र के साथ कोई सकारात्मक बातचीत का अनुभव किया है		
	आपके पति स्वास्थ्य केंद्र द्वारा प्रदान की गई सुविधाओं को स्वीकार करते हैं।		
	स्वास्थ्य केंद्र तक पहुंचने के लिए आपको किसी स्वास्थ्य पेशेवर को साथ ले जाना होगा।		
	आपका परिवार स्वास्थ्य देखभाल योजनाओं के तहत प्रदान की गई सुविधाओं तक पहुँचने में आपकी सहायता करता है।		
स्वास्थ्य केंद्र से संबंधित समस्या	सरकार स्वास्थ्य योजनाओं के अनुसार भुगतान करती है।		
	आपको स्वास्थ्य केन्द्रों पर स्वास्थ्य सुविधाओं के लिए इंतजार करने की आवश्यकता नहीं है।		
	आपको स्वास्थ्य देखभाल केंद्र पर मातृ स्वास्थ्य देखभाल योजनाओं से संबंधित लाभों तक पहुंच प्राप्त करना व्यवहार्य लगता है।		
	स्वास्थ्य केंद्र पर निर्धारित दवाएं/जांच उपलब्ध हैं।		
	स्वास्थ्य सेवा केंद्र का वातावरण स्वच्छ एवं स्वास्थ्यकर है।		
	स्वास्थ्य केंद्र में पर्याप्त स्वास्थ्य कर्मचारी हैं।		
स्वास्थ्य पेशेवर	स्वास्थ्य पेशेवर इन स्वास्थ्य योजनाओं के लिए परामर्श और जागरूकता प्रदान करते हैं।		
	स्वास्थ्य पेशेवर स्वीकार्य और उचित व्यवहार का प्रदर्शन करते हैं।		
	स्वास्थ्य केंद्र पर महिला डॉक्टर उपलब्ध है।		

	आपको स्वास्थ्य देखभाल केंद्र में स्वास्थ्य स्थिति के बारे में स्पष्टीकरण और शिक्षा दी जाती है।		

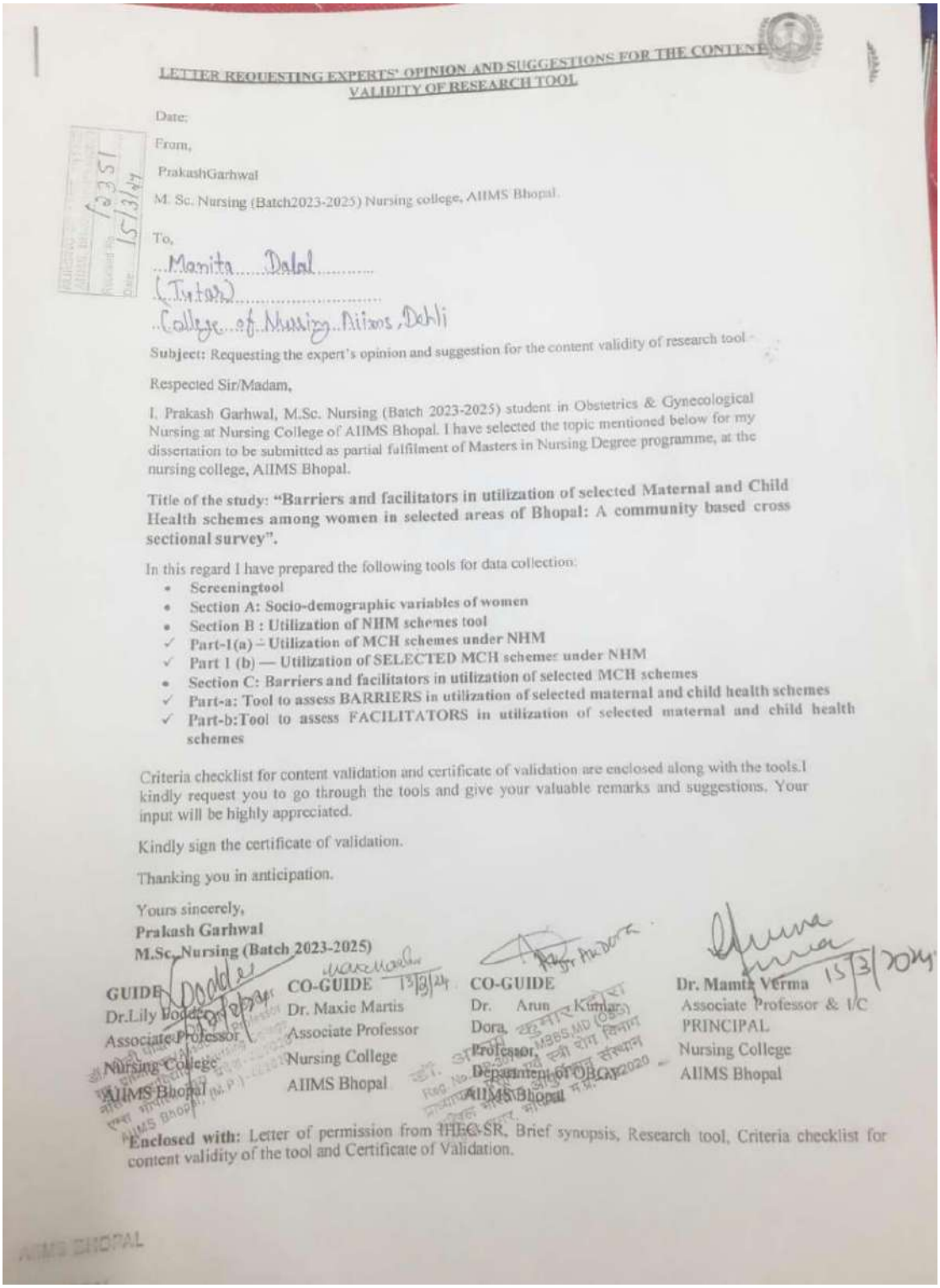
ANNEXURE 4

LIST OF EXPERTS FOR CONTENT VALIDITY

S.No	NAME OF EXPERT	DEPARTMENT & DESIGNATION
NURSING COLLEGE, AIIMS BHOPAL		
1.	Dr. Naseema Shafqat	Obstetrics and gynecological nursing Assistant Professor, Nursing College, AIIMS, Bhopal
AIIMS, BHOPAL		
2.	Dr. Avantika Gupta	Associate Professor Department of obstetrics and gynecology AIIMS, Bhopal
3.	Dr. Bharti Singh	Additional Professor Department of obstetrics and gynecology AIIMS, Bhopal
4.	Dr. Ajay Haldar	Associate Professor Department of obstetrics and gynecology AIIMS, Bhopal
5.	Dr. Nitu Mishra	Associate Professor Department of obstetrics and gynecology AIIMS, Bhopal
EXTERNAL VALIDATORS		
6.	Ms. Manita Dalal	Tutor college of Nursing, AIIMS Delhi
7.	Mrs. D. Koteswarmma	Tutor college of Nursing, AIIMS Patna

ANNEXURE 5

LETTER REQUESTING EXPERTS' OPINION AND SUGGESTIONS FOR THE CONTENT VALIDITY OF TOOL



LETTER REQUESTING EXPERTS' OPINION AND SUGGESTIONS FOR THE CONTENT VALIDITY OF RESEARCH TOOL

Date:

From,

PrakashGarhwal

M. Sc. Nursing (Batch2023-2025) Nursing college, AIIMS Bhopal.

To,

Manita Dalal

(Tutor)

College of Nursing, Aiims, Delhi

Subject: Requesting the expert's opinion and suggestion for the content validity of research tool

Respected Sir/Madam,

I, Prakash Garhwal, M.Sc. Nursing (Batch 2023-2025) student in Obstetrics & Gynecological Nursing at Nursing College of AIIMS Bhopal. I have selected the topic mentioned below for my dissertation to be submitted as partial fulfilment of Masters in Nursing Degree programme, at the nursing college, AIIMS Bhopal.

Title of the study: "Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey".

In this regard I have prepared the following tools for data collection:

- **Screeningtool**
- **Section A: Socio-demographic variables of women**
- **Section B : Utilization of NHM schemes tool**
  - ✓ **Part-1(a) – Utilization of MCH schemes under NHM**
  - ✓ **Part 1 (b) — Utilization of SELECTED MCH schemes under NHM**
- **Section C: Barriers and facilitators in utilization of selected MCH schemes**
  - ✓ **Part-a: Tool to assess BARRIERS in utilization of selected maternal and child health schemes**
  - ✓ **Part-b:Tool to assess FACILITATORS in utilization of selected maternal and child health schemes**

Criteria checklist for content validation and certificate of validation are enclosed along with the tools.I kindly request you to go through the tools and give your valuable remarks and suggestions. Your input will be highly appreciated.

Kindly sign the certificate of validation.

Thanking you in anticipation.

Yours sincerely,

Prakash Garhwal

M.Sc. Nursing (Batch 2023-2025)

GUIDE
Dr.Lily Dkhar
Associate Professor
Nursing College
AIIMS Bhopal

CO-GUIDE 13/3/24
Dr. Maxie Martis
Associate Professor
Nursing College
AIIMS Bhopal

CO-GUIDE
Dr. Arun Kumar Dora,
Professor,
Department of OBGY
AIIMS Bhopal

Dr. Mamta Verma 15/3/2024
Associate Professor & I/C
PRINCIPAL
Nursing College
AIIMS Bhopal

Enclosed with: Letter of permission from IHEC-SR, Brief synopsis, Research tool, Criteria checklist for content validity of the tool and Certificate of Validation.

AIIMS BHOPAL

ANNEXURE 6

CRITERIA CHECKLIST FOR THE VALIDATION OF THE TOOL

CRITERIA CHECK LIST FOR THE VALIDATION OF THE TOOL

Screening tool consists of 4 questionnaire. These questions will be asked to participants. We need your expert judgement on degree of relevancy of each item. If there is any suggestions and modification, please mention in the remark's column. Your expert opinion and kind cooperation will behighly appreciated.

Questions	**Highly relevant 4**	**Quite Relevant 3**	**Some what Relevant 2**	**Not Relevant 1**	**Remarks**
1. What is your current age?					
2. Age of your youngest child? **a) <1 year** **b) >1year**					
3. Are you diagnosed with any critical illness? **a) Yes** **b) No** **c) If yes, then specify ---- --------**					
4. Are you able to understand and speak Hindi, English or both languages? **a) Yes** **b) No**					

Suggestions, if any:

Section A: socio-demographic variables of women

It consists of total 8 items, to assess the socio-demographic variables of women. We need your expert judgement on degree of relevancy of each item. If there is any suggestions and modification, please mention in the remark's column. Your expert opinion and kind cooperation will be highly appreciated.

Item no.	Highly relevant 4	Quite Relevant 3	Somewhat relevant 2	**Not relevant 1**	**Remarks**
1. Age (in years)					
2. RELIGION A) Hindu B) Muslim C) Christian D) Other (Specify) _____					
3. Socio economic class (Modified Kuppuswamy socioeconomic scale 2023) Upper(I) Upper middle (II) Lower middle (III) Upper lower (IV) Lower (V) i). EDUCATIONAL(Modified Kuppuswamy socioeconomic scale 2023) A) Professional degree B) Graduate C)Intermediate/ diploma D) High school E) Middle school F) Primary School G) Illiterate ii). OCCUPATION(Modified Kuppuswamy socioeconomic scale 2023) A. Legislators, senior officials, managers B. Professionals C. Technicians/associate professionals D. Clerks E. Skilled workers, shop and market sales workers F. Skilled agricultural and fishery					

workers G. Crafts and related workers H. Plant and machine operators and assemblers I. Elementary occupation J. Unemployed iii). FAMILY INCOME IN RUPEES(Modified Kuppuswamy socioeconomic scale 2023) a) >146,104 b) 109,580-146,103 c) 73,054- 109,579 d) 68,455- 73,053 e) 63,853- 68,454 f) 59,252- 63,853 g) 54,651-59,251 h) 45,589- 54,650 i) 36,527- 45,588 j) 21,914- 36,526 k) 7316- 21,913 l) <= 7315					
4. RESIDENCE A) Barkhera Pathani PHC B) Saibaba Nagar PHC					
5. TYPE OF DIET A) Vegetarian B) Non-Vegetarian C) Both					
6. TYPE OF FAMILY A) Nuclear B) Joint					
7.DURATION OF MARRIAGE A) <1 year B) 1-2 years C) 2-3 years D) >3 years					
8. Number of children A) 1 B) >1					

Suggestions, if any:

Section B. Utilization of NHM schemes tool:

Part- a: Utilization of MCH schemes under NHM

It consists of total 6 items, to assessschemes you have utilized which runs under NHM. We need your expert judgment on degree of relevancyof each question. If there is any suggestions and modification, please mention in theremark'scolumn. Yourexpertopinion and kind cooperationwill behighly appreciated.

Item no.	Highly relevant 4	Quite Relevant 3	Somewhat relevant 2	Not relevant 1	Remarks
1.**JSY**(Janani Suraksha Yojana) (Yes/No)					
2.JSSY(Janani Shishu Suraksha Karyakram) **(Yes/No)**					
3.SUMAN(Surak shit Matratva Ashwasan) **(Yes/No)**					
4.Extended PMSMA(Pradhan Mantri Surakshit Matritva Abhiyan)**(Yes/No)**					
5.IMNCI(Integrated Management of Neonatal and Childhood Illness) **(Yes/No)**					
6.NSSK(Navjat Shishu Suraksha Karyakram) **(Yes/No)**					

Suggestions, if any:

Part-b: Utilization of selected MCH schemes under NHM

It consists of total 2schemes under which7 items are present, to assess selected schemes utilised which runs under NHM. We need your expert judgement on degree of relevancy of each question. If there is any suggestions and modification, please mention in the remark's column. Your expert opinion and kind cooperation will be highly appreciated.

SCHEME	**Benefits Utilised**	**Highly Relevant 4**	**Quite Relevant 3**	**Somewhat relevant 2**	**Not Relevant 1**	**Remarks**
1. JSY	i. Had you got institutional delivery counselling?					
	ii. Had you got any incentive for institutional delivery?					
	iii. Did you need to pay any charges during delivery?					
2.SUMAN	i. Had any service charges you pay?					
	ii. Had any denial in provide health facilities at public health centre?					
	iii. Did you find any disrespect at public health centre?					
	iv. Did you got any cash incentive get under this scheme?					

Suggestions if any:

Section C: Barriers and facilitators in utilization of selected MCH schemes

Part-a: Tool to assess the BARRIERS in utilization of selected MCH schemes

It consists of total 21 items, to assess the barriers of selected MCH scheme .We need your expert judgment on degree of relevancy of each question. If there are any suggestions and modification, please mention in the remark's column. Your expert opinion and kind cooperation will be highly appreciated.

S.no	Questions	Highly Relevant 4	Quite Relevant 3	Somewhat relevant 2	Not Relevant 1	Remarks
Socio-economical	Is the health centre very far from the house?					
	Is there any adequate transport facility available to reach health care centre?					
	Do you have any financial issues to assess these facilities?					
Educational	Is there a lack of knowledge about the existing schemes?					
Culture & language	Do you face any problem during communication with the health care providers?					
	Did health care providers disrespect your cultural values?					
Personal	Do you find any difficulty related to the timing schedule of the maternal health care clinic?					
	Is there any unpleasant Previous experience with the health care centre?					
	Does your husband					

	accepts the facilities provided by health care providers?					
	Do you have a family member who helps you to take you to the health care centre?					
	Does your family not support you to access the facilities provided under health care					

	schemes?					
Health centre related problem	Does the government do not pay as said by the Health Schemes?					
	Is the health care facility available at the health centre is adequate?					
	Do you need to wait for long hours at the health centres for facilities of health schemes?					
	Do you find adequate accessibility of benefits related to maternal health care schemes at health care centre?					
	Is there a non-availability of prescribed drugs at the health centre?					
	Is the environment at the health care centre unhygienic?					
Health Professional	Does the health centre have inadequate health care staff?					

	Do the health personnel exhibit unacceptable/improper behaviour?					
	Is there a non-availability of female doctors at the health centre?					
	Do you find inadequate explanation about disease condition at health care centre?					

Suggestion if any:

Part-b: Tool to assess the FACILITATORS in utilization of selected MCH schemes

It consists of total 21 items, to assess the facilitators in selected MCH scheme. We need your expert judgment on degree of relevancy of each question. If there are any suggestions and modification, please mention in the remark's column. Your expert opinion and kind cooperation will be highly appreciated.

S.no	Questions	Highly Relevant 4	Quite Relevant 3	Somewhat relevant 2	Not Relevant 1	Remarks
Socio-economical	Is the health center close to your residence?					
	Is there a monetary incentive offered within health schemes?					
	Are you motivated by the cash incentive to utilize these schemes?					
	Has the cash incentives been timely transferred into the bank account?					
	Are the health facilities provided at the healthcare center free of cost?					
Educational	Is there a government program aimed at raising awareness about health schemes?					
Culture & language	Has your healthcare provider respected your cultural values?					

	Are you comfortable while communicating with health care providers?					
Personal	Does your family support you to access the facilities provided under health care schemes?					
	Is the timing schedule of the health care centre feasible to utilize health care schemes?					
Health centre related problem	Does the health centre have fewer					

	waiting hours?					
	Does the health centre have adequate health care staff?					
	Have you ever been provided any leaflets related to health schemes by health care provider?					
	Have you ever seen any video related to health schemes at health care centre?					
	Is there a adequate availability of prescribed drugs at the health centre?					

	Do you find adequate explanation about disease condition at health care centre? Does the health centre have adequate health care staff?					
Health Professional	Is health counselling provided for these schemes by health care provider? Is there availability of female doctors at the health centre?					
	Do the health personnel exhibit acceptable/proper behaviour?					
	Have you ever been motivated to access the benefits of health schemes by any health care provider?					

Suggestions if any

ANNEXURE 7

CONTENT VALIDATION CERTIFICATION

CERTIFICATE OF VALIDATION

This is to certify that the Questionnaire/tool constructed by, Prakash Garhwal, M.Sc. Nursing 2023-25 batch student, Nursing College, AIIMS Bhopal, to be used in his study titled **"Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey"** has been validated by me and is found to be **valid/ not valid.**

Overall remark:

Signature:

Name of the expert:

Designation:

Name of the institution:

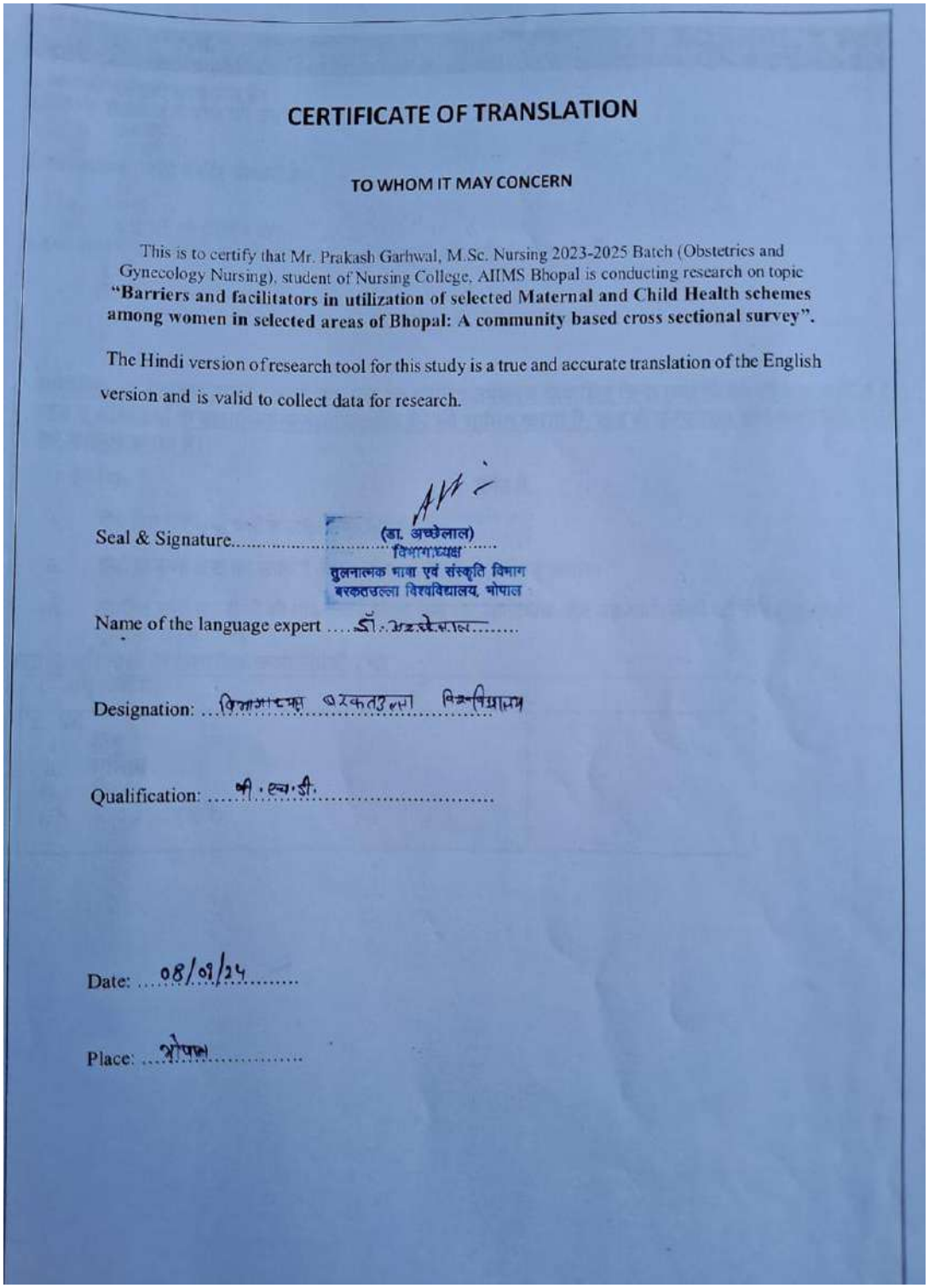
Official seal:

Date:

Place:

ANNEXURE 8

CERTIFICATE OF TRANSLATION (HINDI)



CERTIFICATE OF TRANSLATION

TO WHOM IT MAY CONCERN

This is to certify that Mr. Prakash Garhwal, M.Sc. Nursing 2023-2025 Batch (Obstetrics and Gynecology Nursing), student of Nursing College, AIIMS Bhopal is conducting research on topic **"Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey".**

The Hindi version of research tool for this study is a true and accurate translation of the English version and is valid to collect data for research.

Seal & Signature..... (डा. अच्छेलाल) विभागाध्यक्ष तुलनात्मक भाषा एवं संस्कृति विभाग बरकतउल्ला विश्वविद्यालय, भोपाल

Name of the language expert .... डॉ. अच्छेलाल.....

Designation: विभागाध्यक्ष बरकतउल्ला विश्वविद्यालय

Qualification: पी.एच.डी.

Date: 08/01/24

Place: भोपाल

ANNEXURE 9

CERTIFICATE OF TRANSLATION (ENGLISH)

CERTIFICATE OF TRANSLATION

TO WHOM IT MAY CONCERN

This is to certify that Mr. Prakash Garhwal, M.Sc. Nursing 2023-2025 Batch (Obstetrics and Gynecology Nursing), student of Nursing College, AIIMS Bhopal is conducting research on topic **"Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey".**

The English version of research tool for this study is a true and accurate translation of the Hindi version and is valid to collect data for research.

Seal & Signature..... 12/8/2024

Department of Languages & Culture

Name of the language expert ..... Dr. Jyoti Thakur

Designation: Faculty in English, BU, Bhopal

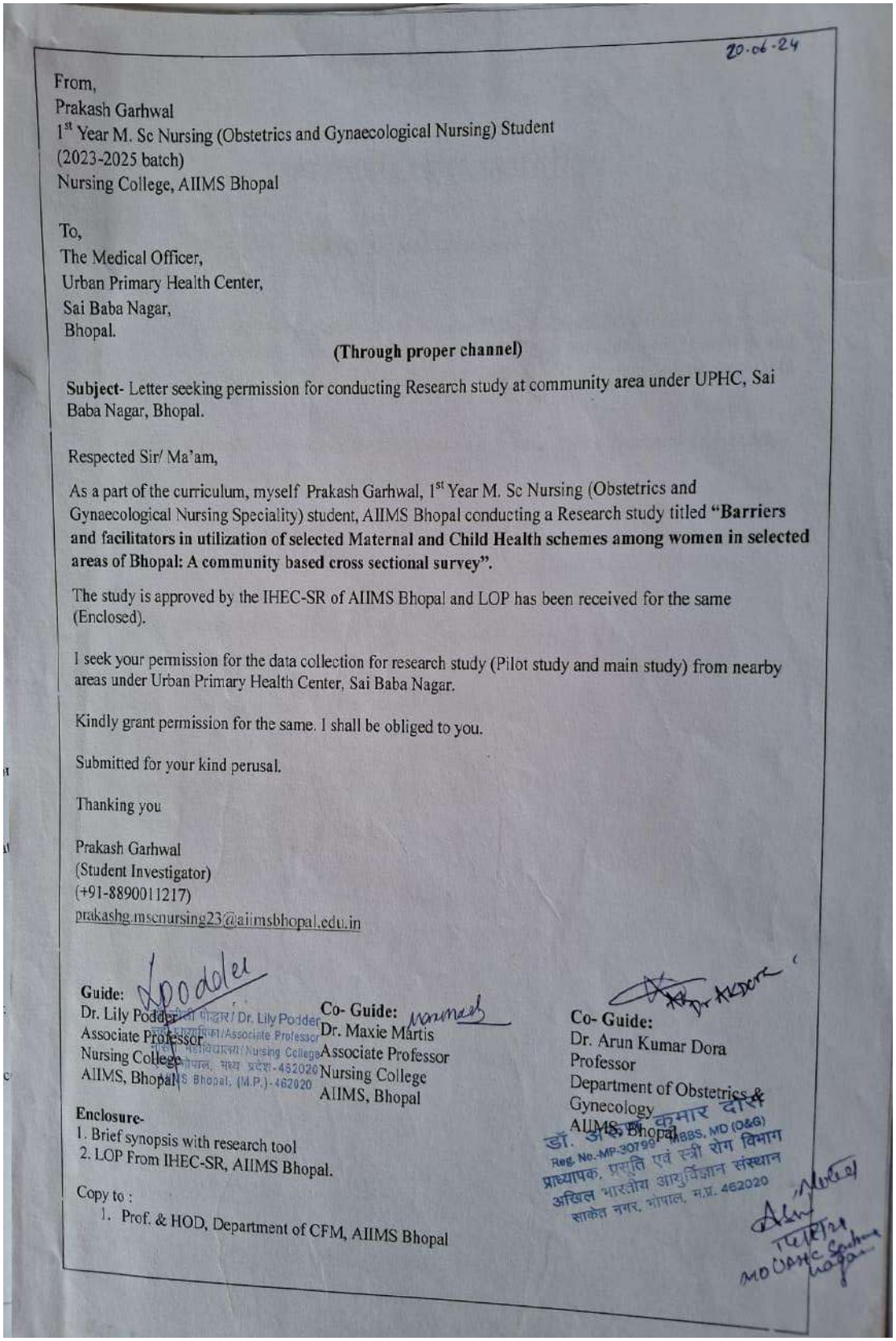
Qualification: Ph.D

Date: 12/8/2024

Place: Bhopal

ANNEXURE 10

LETTER SEEKING PERMISSION TO CONDUCT THE STUDY



20.06.24

From,
Prakash Garhwal
1st Year M. Sc Nursing (Obstetrics and Gynaecological Nursing) Student
(2023-2025 batch)
Nursing College, AIIMS Bhopal

To,
The Medical Officer,
Urban Primary Health Center,
Sai Baba Nagar,
Bhopal.

(Through proper channel)

Subject- Letter seeking permission for conducting Research study at community area under UPHC, Sai Baba Nagar, Bhopal.

Respected Sir/ Ma'am,

As a part of the curriculum, myself Prakash Garhwal, 1st Year M. Sc Nursing (Obstetrics and Gynaecological Nursing Speciality) student, AIIMS Bhopal conducting a Research study titled **"Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey".**

The study is approved by the IHEC-SR of AIIMS Bhopal and LOP has been received for the same (Enclosed).

I seek your permission for the data collection for research study (Pilot study and main study) from nearby areas under Urban Primary Health Center, Sai Baba Nagar.

Kindly grant permission for the same. I shall be obliged to you.

Submitted for your kind perusal.

Thanking you

Prakash Garhwal
(Student Investigator)
(+91-8890011217)
prakashg.mscnursing23@aiimsbhopal.edu.in

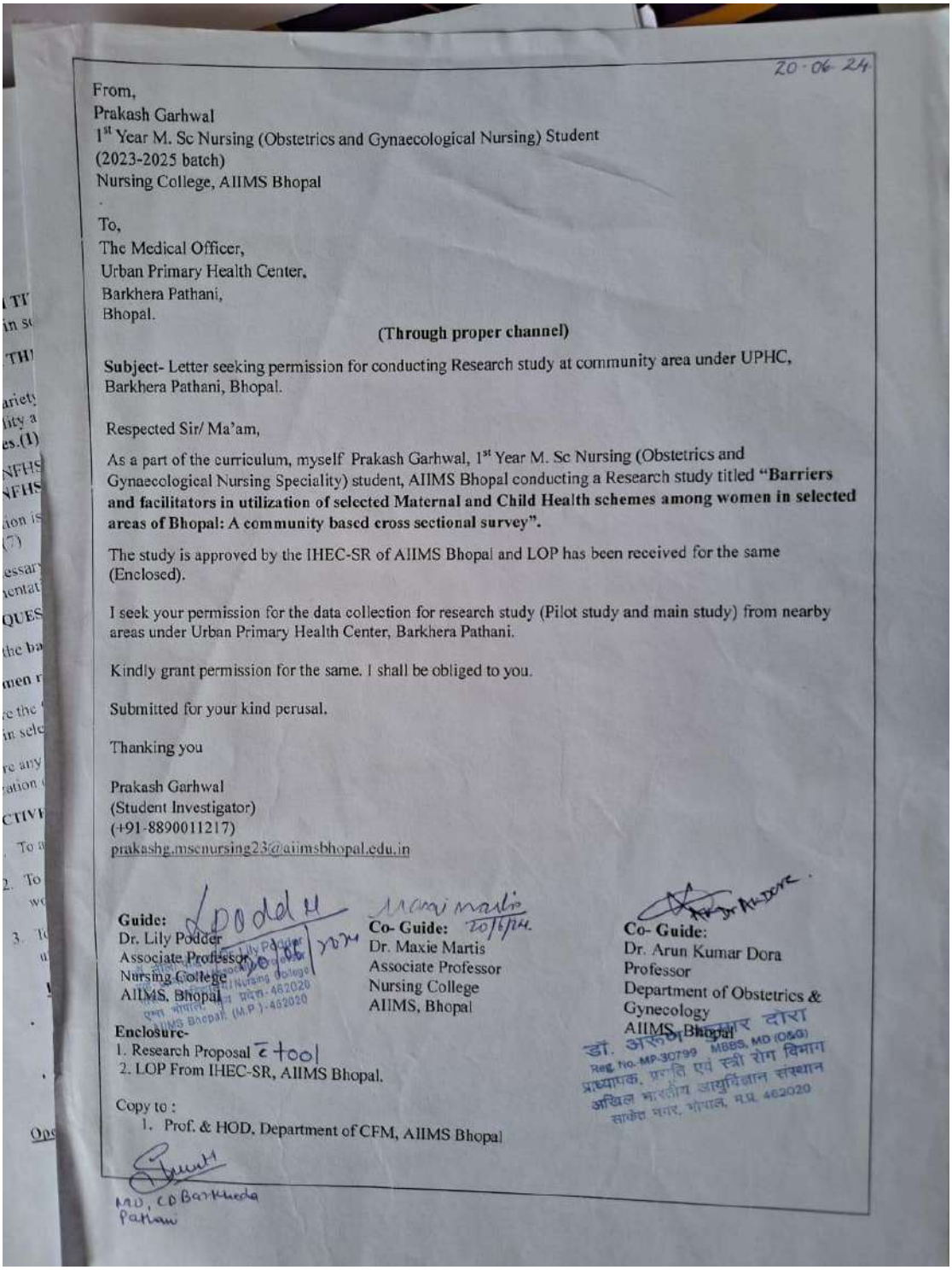
Guide:
Dr. Lily Podder
Associate Professor
Nursing College
AIIMS, Bhopal

Co- Guide:
Dr. Maxie Martis
Associate Professor
Nursing College
AIIMS, Bhopal

Co- Guide:
Dr. Arun Kumar Dora
Professor
Department of Obstetrics & Gynecology
AIIMS, Bhopal

Enclosure-
1. Brief synopsis with research tool
2. LOP From IHEC-SR, AIIMS Bhopal.

Copy to :
1. Prof. & HOD, Department of CFM, AIIMS Bhopal



20.06.24

From,
Prakash Garhwal
1st Year M. Sc Nursing (Obstetrics and Gynaecological Nursing) Student
(2023-2025 batch)
Nursing College, AIIMS Bhopal

To,
The Medical Officer,
Urban Primary Health Center,
Barkhera Pathani,
Bhopal.

(Through proper channel)

Subject- Letter seeking permission for conducting Research study at community area under UPHC, Barkhera Pathani, Bhopal.

Respected Sir/ Ma'am,

As a part of the curriculum, myself Prakash Garhwal, 1st Year M. Sc Nursing (Obstetrics and Gynaecological Nursing Speciality) student, AIIMS Bhopal conducting a Research study titled **"Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey".**

The study is approved by the IHEC-SR of AIIMS Bhopal and LOP has been received for the same (Enclosed).

I seek your permission for the data collection for research study (Pilot study and main study) from nearby areas under Urban Primary Health Center, Barkhera Pathani.

Kindly grant permission for the same. I shall be obliged to you.

Submitted for your kind perusal.

Thanking you

Prakash Garhwal
(Student Investigator)
(+91-8890011217)
prakashg.mscnursing23@aiimsbhopal.edu.in

Guide:
Dr. Lily Podder
Associate Professor
Nursing College
AIIMS, Bhopal

Co- Guide:
Dr. Maxie Martis
Associate Professor
Nursing College
AIIMS, Bhopal

Co- Guide:
Dr. Arun Kumar Dora
Professor
Department of Obstetrics & Gynecology
AIIMS, Bhopal

Enclosure-
1. Research Proposal
2. LOP From IHEC-SR, AIIMS Bhopal.

Copy to :
1. Prof. & HOD, Department of CFM, AIIMS Bhopal

MO, CO Barkheda Pathani

ANNEXURE 11

PARTICIPANT INFORMATION SHEET (ENGLISH)

PARTICIPANT INFORMATION SHEET

Date:

15/01/2024

Title of the Study

Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey

Student Investigator: Mr. Prakash Garhwal M.Sc. Nursing Student (2023-2025)

Guide: - Dr. Lily Podder Associate Professor, Nursing College, AIIMS Bhopal
Co-Guide: - Dr. Maxie Martis, Associate Professor, Nursing College, AIIMS Bhopal

Introduction: - The research study aims to Assess the "Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey.

Purpose of study: The purpose of this study to Assess the Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey

Participation – what is included?

a. **Do I have to take part?**
   Participation in this research is entirely voluntary. A decision to not take part, or withdraw at any time, will not affect your right or medical care in any way.

b. **What is expected of me if I join?**
   If you agree to participate, you will sign the informed consent. You will be asked a few information about your socio-demographic data (such as Age, Gender, educational qualification, occupation, BMI, Family history etc.). You may provide the relevant details asked.

c. **How long will my participation in the study last?**
   The duration of the participation lasts for 5-10 minutes

d. **Do I have to come for extra visits or undergo extra investigation for the study?**
   NO.

e. **What are the possible benefits in taking part?**
   To Assess the Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional

survey

f. What are the possible disadvantages and risks of taking part?

There are no major foreseeable disadvantages or risk because of the study.

g. What happens to the information collected about me?

All information collected will be kept strictly confidential. Not share with anyone. Result from the study will be reported as group data and will not identify you in any way.

h. What happens if I change my mind about participating in this study?

You are entitled to change your mind and withdraw at any time during the study without any disadvantage or penalty.

I.Whom should I contact for more information regarding this or if I have any question/doubts in my mind later?

If you want any information, you can contact the following:

Mr. Prakash Garhwal
Post graduate student
Nursing College,
AIIMS Bhopal
Ph: 8890011217
Email: PRAKASHG.mscnursing23@aiimsbhopal.edu.in

Dr. Ankur Joshi
Member Secretary,
Institution Human Ethics Committee
Student Research
Ph: 8818899050,
Email:ihecpgr@aiimsbhopal.edu.in

ANNEXURE 12

PARTICIPANT INFORMATION SHEET (HINDI)

अनुलग्नक 3B

प्रतिभागी सूचना पत्रक

दिनांक: 15/01/2024

1. अध्ययन का शीर्षक

भोपाल के चयनित क्षेत्रों में महिलाओं के बीच चयनित मातृ और बाल स्वास्थ्य योजनाओं के उपयोग में बाधाएं और सहायक: एक समुदाय आधारित क्रॉस सेक्शनल सर्वेक्षण

1. **छात्र अन्वेषक:**श्री,**प्रकाश गढवाल** एम.एससी नर्सिंग छात्र (2023-2025)
2. **मार्गदर्शक:-डॉ. लिली पोद्दर,**सहायक प्राध्यापिका, नर्सिंग कॉलेज, एम्स भोपाल
3. **सह-मार्गदर्शक:डॉमेक्सी मार्टिस** सहायक प्राध्यापिका, नर्सिंग कॉलेज, एम्स भोपाल

परिचय: - हर दिन, गर्भावस्था या प्रसव से संबंधित जटिलताएं दुनिया भर में लगभग 830 महिलाओं के जीवन का दावा करती हैं। (डब्ल्यूएचओ -2019) एसडीजी-3, 2030 तक, वैश्विक मातृ मृत्यु दर को प्रति 100,000 जीवित जन्मों पर 70 से कम करने का लक्ष्य। (यूनिसेफ -2015) मातृ और बाल मृत्यु दर को रोकना मातृत्व और बाल स्वास्थ्य कार्यक्रम का प्राथमिक लक्ष्य है, क्योंकि यह मां और बच्चे दोनों के लिए परिणामों में सुधार करता है। (एनएचएम-2022)

अध्ययन का उद्देश्य:इस अध्ययन का उद्देश्य भोपाल के चयनित क्षेत्रों में महिलाओं के बीच चयनित मातृ और बाल स्वास्थ्य योजनाओं के उपयोग में बाधाएं और सहायक कारणों का अध्ययन एक समुदाय आधारित क्रॉससेक्शनल सर्वेक्षण प्रभाव को निर्धारित करना है।

4. भागीदारी - क्या शामिल है?

I. क्या मुझे भाग लेना है?

इस शोध में भागीदारी पूरी तरह से स्वैच्छिक है। भाग न लेने या किसी भी समय वापस लेने का निर्णय किसी भी तरह से आपके अधिकार या चिकित्सा देखभाल को प्रभावित नहीं करेगा।

II. अगर मैं शामिल हो जाऊं तो मुझसे क्या उम्मीद की जाती है?

यदि आप भाग लेने के लिए सहमत हैं, तो आप सूचित सहमति पर हस्ताक्षर करेंगे। आपसे आपके सामाजिक-जनसांख्यिकीय डेटा (जैसे आयु, लिंग, शैक्षिक योग्यता, व्यवसाय, बीएमआई, आदि) के बारे में कुछ जानकारी मांगी जाएगी। आप पूछे गए प्रासंगिक विवरण प्रदान कर सकते हैं

अध्ययन में मेरी भागीदारी कब तक चलेगी?

भागीदारी की अवधि 5-10 मिनट तक रहती है

III. क्या मुझे अध्ययन के लिए अतिरिक्त मुलाकातों या अतिरिक्त जांच के लिए आना होगा?

नहीं।

IV. भाग लेने के संभावित लाभ क्या हैं?

सांस लेने में तकलीफ को कम करने के लिए आपको नि:शुल्क शिक्षा और सांस लेने के व्यायाम का प्रदर्शन दिया जाता है।

V. भाग लेने के संभावित नुकसान और जोखिम क्या हैं?

अध्ययन के कारण कोई बड़ा पूर्वाभास योग्य नुकसान या जोखिम नहीं है।

VI. मेरे बारे में एकत्र की गई जानकारी का क्या होता है?

एकत्र की गई सभी सूचनाओं को कड़ाई से गोपनीय रखा जाएगा। किसी से शेयर नहीं करते। अध्ययन के परिणाम समूह डेटा के रूप में रिपोर्ट किए जाएंगे और किसी भी तरह से आपकी पहचान नहीं करेंगे।

VII. यदि मैं इस अध्ययन में भाग लेने के बारे में अपना विचार बदल दूं तो क्या होगा?

आप अपना विचार बदलने और अध्ययन के दौरान किसी भी समय बिना किसी नुकसान या दंड के वापस लेने के हकदार हैं।

इस बारे में अधिक जानकारी के लिए या बाद में मेरे मन में कोई प्रश्न/शंका होने पर मुझे किससे संपर्क करना चाहिए?

कोई जानकारी चाहिए तो संपर्क कर सकते हैं

श्री प्रकाश गढवाल
स्नातकोत्तर विद्यार्थी नर्सिंग कॉलेज,
एम्स भोपाल
फोन: 8890011217
ईमेल:PRAKASHG.mscnursing23@aiimsbhopal.edu.in

डॉ.अंकुर जोशी
सदस्य सचिव,
इंस्टीट्यूशन ह्यूमन एथिक्स कमेटी
स्टूडेंट रिसर्च
फ़ोन: 8818899050,
ईमेल: ihecpgr@aiimsbhopal.edu.in

ANNEXURE 13

INFORMED CONSENT SHEET (English)

Informed consent form

Participant's copy

Title**"Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey"**

I have been fully informed of the above study as per the patient's information sheet. I understand that there is no major risk associated with this study. I hereby agree that I am willing to participate in the study. I also agree to allow researcher to take photographs of the researchers doing the study. I furthermore recognize the fact that I am free to withdraw this consent and to discontinue participation in this project at any time without prejudice to the treatment.

Investigator's name:

Investigator's signature:

Participant's name:

Participant's signature:

Date:

Researcher's copy

Informed consent form

Title**"Barriers and facilitators in utilization of selected Maternal and Child Health schemes among women in selected areas of Bhopal: A community based cross sectional survey"**I have been fully informed of the above study as per the participant's information sheet. I understand that there is no major risk associated with this study. I hereby agree that I am willing to participate in the study. I also agree to allow researcher to take photographs of the researchers doing the study. I furthermore recognize the fact that I am free to withdraw this consent and to discontinue participation in this project at any time without prejudice to the treatment.

Investigator's name:

Investigator's signature:

Participant's name:

Participant's signature:

ANNEXURE 14

INFORMED CONSENT SHEET (Hindi)

सूचित सहमति प्रपत्र

प्रतिभागी की प्रति
शीर्षक: भोपाल के चयनित क्षेत्रों में महिलाओं के बीच चयनित मातृ और बाल स्वास्थ्य योजनाओं के उपयोग में बाधाएं और सहायक: एक समुदाय आधारित क्रॉस सेक्शनल सर्वेक्षण

प्रतिभागी के सूचना पत्रक के अनुसार मुझे उपरोक्त अध्ययन के बारे में पूरी जानकारी दी गई है। मैं समझता हूं कि इस अध्ययन से जुड़ा कोई बड़ा जोखिम नहीं है। मैं इस बात से सहमत हूं कि मैं अध्ययन में भाग लेने के लिए तैयार हूं। मैं शोधकर्ता को अध्ययन कर रहे शोधकर्ताओं की तस्वीरें लेने की अनुमति देने के लिए भी सहमत हूं। इसके अलावा मैं इस तथ्य को स्वीकार करता हूं कि मैं इस सहमति को वापस लेने और उपचार के प्रति पूर्वाग्रह के बिना किसी भी समय इस परियोजना में भागीदारी बंद करने के लिए स्वतंत्र हूं।
अन्वेषक का नाम:
अन्वेषक के हस्ताक्षर:
मरीज का नाम:
प्रतिभागी के हस्ताक्षर:
तारीख:

शोधकर्ता की प्रति
सूचित सहमति प्रपत्र
शीर्षक: 'एम्स भोपाल भोपाल के चयनित क्षेत्रों में महिलाओं के बीच चयनित मातृ और बाल स्वास्थ्य योजनाओं के उपयोग में बाधाएं और सहायक: एक समुदाय आधारित क्रॉस सेक्शनल सर्वेक्षण

प्रतिभागीके सूचना पत्रक के अनुसार मुझे उपरोक्त अध्ययन के बारे में पूरी जानकारी दी गई है। मैं समझता हूं कि इस अध्ययन से जुड़ा कोई बड़ा जोखिम नहीं है। मैं इस बात से सहमत हूं कि मैं अध्ययन में भाग लेने के लिए तैयार हूं। मैं शोधकर्ता को अध्ययन कर रहे शोधकर्ताओं की तस्वीरें लेने की अनुमति देने के लिए भी सहमत हूं। इसके अलावा मैं इस तथ्य को स्वीकार करता हूं कि मैं इस सहमति को वापस लेने और उपचार के प्रति पूर्वाग्रह के बिना किसी भी समय इस परियोजना में भागीदारी बंद करने के लिए स्वतंत्र हूं।
अन्वेषक का नाम:
अन्वेषक के हस्ताक्षर:
मरीज का नाम:
प्रतिभागी के हस्ताक्षर:
तारीख:

ANNEXURE 15

MASTER DATA SHEET

ode n	SD1	SD2	SD3	SD4	SD5	SD6	SD7	SD8	pta1	pta2	pta3	pta4	pta5	pta6	JY1	JY2	JY3	SU1	SU2	SU3	SE1	SE2	SE3	SE4	SE5	E1	E2	CL1	CL2	P1	P2	P3	P4	P5	HC1	HC2	HC3	HC4	HC5	HC6	HP1	HP2	HP3	HP4
P1	2	1	2	1	2	3	1	4	1	1	0	0	0	0	1	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	0	1	1	1	1	0	1	1	1	1	1	0	1	0
P2	1	1	3	1	3	4	1	3	1	1	0	0	0	0	1	1	1	0	0	0	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0	0
P3	2	2	2	1	1	3	1	3	1	1	1	0	0	0	1	1	0	0	0	1	0	1	0	0	1	1	1	1	0	0	1	1	1	1	0	0	0	0	1	1	0	1	1	1	1	1
P4	1	1	2	1	2	3	1	3	1	1	1	0	0	0	1	1	0	0	0	1	1	0	1	1	0	1	1	0	1	0	1	1	1	1	1	0	1	1	0	1	0	0	0	1	0
P5	3	1	1	1	3	4	2	1	1	1	0	1	0	0	1	0	0	1	1	0	0	0	0	1	1	0	0	1	0	1	0	0	0	1	0	0	0	1	0	1	1	1	0	0
P6	2	1	2	2	1	4	2	2	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	0	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	1	1	1	0
P7	1	1	2	2	3	2	1	2	1	1	1	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	0	1	0	1	0	1	0	1	0	1	1	0	0	0	0	0	0	1	0
P8	3	2	3	2	2	4	2	2	1	1	0	0	0	0	0	1	0	1	1	0	1	0	1	1	1	0	1	0	0	0	1	1	1	1	0	0	1	1	0	1	1	1	0	1
P9	2	2	4	2	1	2	1	2	1	1	1	0	0	0	0	1	0	0	0	1	1	0	1	1	1	0	1	0	0	1	1	0	1	1	1	0	1	1	1	1	0	1	1	0
P10	1	1	2	2	3	1	1	2	1	1	0	0	0	0	1	1	0	1	1	0	0	0	0	0	1	1	0	1	0	1	0	1	1	0	1	0	1	0	1	0	0	1	1	1	0	0
P11	2	2	1	2	2	2	2	4	1	1	0	0	0	0	1	0	1	1	0	0	1	1	1	0	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	0	0	1	1	0	0
P12	1	3	2	1	3	3	1	2	1	1	1	0	0	0	1	1	0	1	1	1	1	0	0	0	1	0	0	1	0	1	0	1	0	1	0	0	1	0	1	1	1	0	0	1	1	1
P13	3	1	4	1	3	4	2	3	1	1	0	0	0	0	1	1	1	1	1	0	0	1	0	0	1	0	1	1	1	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	0	0
P14	3	2	4	1	2	4	2	2	1	1	1	1	0	0	1	1	0	0	0	1	1	0	1	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0	0	1	1	1	0	1
P15	1	1	2	1	3	4	2	2	1	1	0	0	0	0	0	0	0	1	1	0	0	1	0	1	1	1	1	0	0	0	1	0	1	0	1	0	1	0	0	0	0	1	1	0	0	0
P16	2	1	2	1	3	4	2	3	1	1	0	0	0	0	1	1	1	0	1	0	0	1	1	1	0	0	1	0	1	0	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	0
P17	2	3	4	1	1	3	1	4	1	1	0	0	0	0	1	1	0	1	0	0	1	0	0	0	1	1	0	0	0	1	1	0	1	1	0	0	0	0	1	1	1	1	0	0	0	1
P18	2	1	1	2	2	2	1	4	1	1	0	0	0	0	0	1	1	0	1	0	0	0	1	0	0	1	0	1	1	0	1	1	1	1	1	1	1	1	0	0	0	1	0	0	1	1
P19	2	1	2	2	1	4	2	3	1	1	1	1	0	0	1	1	0	0	0	1	0	1	0	1	0	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	1	1	0	0	0
P20	2	2	3	2	3	4	2	3	1	1	0	0	0	0	0	1	1	0	1	1	0	0	1	0	0	1	1	0	0	1	0	0	1	0	0	1	0	0	0	1	0	1	0	0	1	0
P21	2	2	2	2	3	4	2	2	1	1	1	0	0	0	1	0	1	0	0	1	1	0	1	1	0	1	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	1
P22	2	1	2	1	1	3	1	4	1	1	0	0	0	0	1	1	0	1	1	0	0	1	1	0	0	1	0	1	0	1	0	1	1	1	1	0	1	1	1	0	0	1	1	0	0	0
P23	1	1	4	1	3	4	1	3	1	1	0	0	0	0	1	1	0	1	1	0	1	0	1	1	0	0	0	0	0	1	1	1	1	1	0	1	0	1	0	1	1	0	0	0	0	0
P24	2	2	2	1	2	3	1	2	1	1	1	0	0	0	1	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	1	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0
P25	2	1	2	1	3	3	1	3	1	1	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	1	0	0	1	1	0	1	0	1	1	0	0	0	0	0	1	1	1	0	1	0
P26	3	1	3	1	2	1	2	2	1	1	0	1	0	0	1	1	0	1	1	0	0	1	0	0	1	0	0	1	0	0	1	1	1	1	0	0	0	0	1	0	1	0	1	0	1	0
P27	3	1	2	2	2	4	2	2	1	1	0	0	0	0	0	1	1	1	1	0	0	0	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1	1	0	0	0	0	0	1	1	0
P28	1	1	2	2	3	2	1	2	1	1	1	1	0	0	1	1	0	0	1	1	0	0	1	0	1	0	1	0	1	0	0	0	1	1	0	0	1	1	0	1	1	0	0	1	1	0
P29	3	2	4	2	2	4	2	3	1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	1	1	0	1	1	0	1	1	0	0	0	1	0	0	1	1	0	0	0	0
P30	2	2	4	2	1	2	1	2	1	1	1	0	0	0	1	1	0	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0	1	0	0	0	0	1	0	1	1	0	0	0
P31	3	1	2	2	1	1	1	2	1	1	0	0	0	0	0	1	0	1	1	0	0	1	0	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1	1	1	0	1	1	0	0	0
P32	2	2	1	2	1	2	2	4	1	1	0	0	0	0	1	0	1	1	0	0	1	1	0	1	1	0	0	0	1	0	1	1	0	0	0	1	1	0	0	0	0	1	0	1	0	0
P33	2	3	2	1	3	3	1	2	1	1	0	0	0	0	1	1	0	1	1	0	1	1	0	1	1	1	0	1	1	0	1	1	0	0	1	0	1	0	0	0	1	1	0	0	0	0
P34	3	1	4	1	1	4	2	3	1	1	1	1	0	0	1	1	1	1	0	1	1	0	0	1	1	1	0	0	1	1	0	0	1	1	0	1	1	0	0	1	1	1	0	0	0	0
P35	3	2	3	1	3	4	2	2	1	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	1	0	1	1	1
P36	3	1	2	1	1	4	2	2	1	1	0	0	0	0	0	1	0	1	1	0	0	1	1	0	0	1	1	1	0	0	0	1	1	0	0	1	0	0	1	0	1	1	1	1	1	0
P37	2	1	2	1	1	4	2	4	1	1	0	0	0	0	0	1	0	0	1	0	1	0	0	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0
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